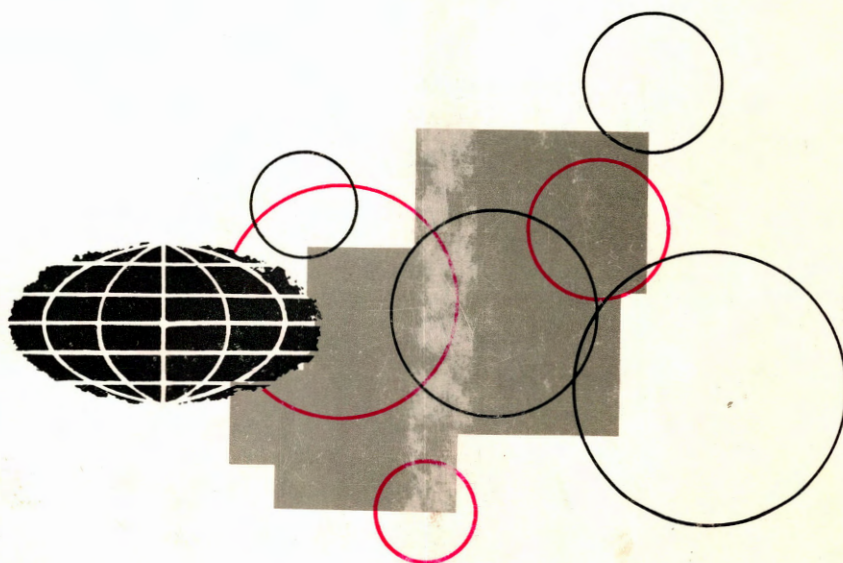


# LANSING

## CENTRAL BUSINESS DISTRICT STUDY

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Grand Rapids, Michigan

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CENTRAL BUSINESS DISTRICT STUDY  
OF  
LANSING, MICHIGAN

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## INTRODUCTION

Metropolitan Lansing and downtown Lansing are continually in the eyes of the public both within the State of Michigan as well as throughout the nation, and it behooves the persons in responsible positions both in business and government to create by action an atmosphere in which the public thinks of the city as a progressive one. The downtown area is a perfect location to put into practice an action program, because every downtown in the United States is outmoded, and the cities where there is real progress are doing something about it. Progressive action here will have the greatest and quickest result in creating the proper impression in the minds of the people about the City of Lansing.

Lansing is over 100 years old and during the course of the years many changes have taken place. Most of what is now known as downtown Lansing (or Central Business District - CBD) was build over 25 years ago. To be exact only 2% of the Central Business District's buildings have been erected within the last 25 years. Twelve per cent of the buildings were erected over 50 years ago. During the period from 1910 to 1935 when most of the downtown office and store buildings were built, Lansing was experiencing the replacement of horses by automobiles. Few people during these years realized how the automobile would dominate out lives during the mid-century nor did many people see how much Lansing would grow. The result of this is that the heart of our vitally important downtown is obsolete for todays way of life.



The importance of downtown is unquestioned. In 1958 downtown represented 2% of the land area of the City of Lansing, but in real estate tax-revenue it represented 20%. Everytime the downtown decreases in value that means the residential tax-payer must pay more in taxes. The downtown offices and stores do not send children to school but yet they carry their proportionate share of school operating and bonded indebtedness taxes.

Downtown Lansing cannot be torn down and rebuilt, nor can it be left by the wayside to decay. It is the focal point of the metropolitan area. The objective of this study is to show how the Central Business District can be refashioned to make it an integral, efficient part of our modern way of life, and also to make it flexible to meet the changes of the next 20 odd years.



## I - DOWNTOWN LANSING TODAY

Downtown Lansing is the hub of the metropolitan area. It has the greatest density of floor space devoted to retailing and offices of any part of the city and within it lie the seats of government for the city, county and state. The major department stores, most of Lansing's important apparel, gift stores and banks are located there and to recreate this density of floor space elsewhere in the suburbs would be a monumental, if not an impractical project.

Downtown's numerous job opportunities located within a small area pulls workers from all over metropolitan Lansing because of its geographic location at the center of the area. It presents to the office worker or store employee the ability to shop to be entertained, to be temporarily lodged, to take care of his or her banking, legal or medical needs. The suburban shopping center proclaims one stop shopping but no center can offer the multitude of goods, services or working facilities that the downtown area presents.

Lansing, like all downtowns, has many inadequacies. The old grid pattern of the streets and limited street area, as currently used, restricts the highway capacity necessary to serve the increasing number of motorists who desire to come downtown. This is why the impact of the private automobile has been greater in the downtown area than any



other part of the city. The Planning Commission's 1957 study shows that some 86,000 vehicles enter the Central Business District during an average (not a peak) 24 hour day. This number of vehicles is 10% greater than the number of passenger cars registered in the Lansing metropolitan area. They also estimate that the traffic volumes downtown are expected to increase, conservatively, between 45% and 50% during the next 15 to 20 years and that the parking demand can increase from 60% to 70%.

There is a shortage of convenient parking spaces for the shopper. As far as location and design of parking facilities are concerned, it must be recognized that there are two basic types; the short time, high turn over parking for the visitor - shopper, which must be roomy and easy to use and convenient to the retail stores and services to be visited. Convenience in this sense means a short block - or closer - from parked car to the store counter or main shopping promenade. Then there is the equally important, comparatively low turn over parking necessary to serve the downtown labor force. The walking distances for this type of parking is not as critical.

The frustrating conflict between pedestrians and automobiles is a major source of irritation to the suburbanite who has been frequently exposed to the suburban shopping center where this trouble does not exist. Outlying shopping centers depend upon the use of the private automobile as transportation for ninety per cent of their customers and have a ratio of three preferably four times as much parking area as there is gross building area.

Downtowns the size of Lansing might physically, if not economically, provide this ratio of parking to building area, but they could not possibly provide the highway capacity to serve half of this parking ratio. Downtown Lansing has some fixed barriers which create a limitation to an optimum solution for any great future expansion.

Lansing is going to grow and in order for that growth to be orderly and efficient the downtown must be modernized. If the downtown is modernized and an atmosphere conducive to increasing business is established it will more than pay its share of costs to the city. If the reverse occurs with the area not doing business then it will not be able to pay the necessary taxes, and the city will have to put money into maintaining it which could better be spent on the new facilities necessary for Lansing's growth.



## II - MARKET STUDY

A detailed knowledge of what exists and what the deficiencies are in the downtown area tells us what is needed, and it is the first step in setting up a comprehensive program for renewal. The first thing to know and analyze is the market presently served and which can be served by Lansing.

First are presented some necessary to know definitions. The important statistical elements are: Population - consumers units (CU's) the U. S. Bureau of Census' unrelated individuals and families are primarily used. Also considered in a given area are the relative number of farm and non-farm individuals and families as their buying habits are different from those of the urbanites. Retail Sales - interest is primarily in General Merchandise, Apparel, Furniture - Home Furnishings store groups which is referred to as GAF. These are the accepted index of shopping goods (seasonal, life time needs) so important to the CBD as compared with convenience goods (daily, weekly needs) mainly food, restaurants, package liquor and drug stores, mostly important to neighborhood and other outlying shopping centers, planned and unplanned. Also considered are "other" shopping goods stores such as jewelry, camera stores, gifts, luggage, books and stationary etc. These together with GAF goods form the merchandise mostly presented in the complete department store and are termed DSTM, department store type merchandise.



We are interested in the dollar sales in these various types of stores and store groups in the CBD and in other competitive locations. These are compared with expenditures which is the amount of dollars spent by an individual or family in these various types of stores where ever they may be located. Four income groups are considered: low - low, under \$2,000 (LL), medium low, \$2,000 to \$3,500 (ML), medium high, \$3,500 to \$5,000 (MH), and high - high, over \$6,000 (HH).

### MARKET AREA

In defining the market area it is evident that the CBD has competition from a great many sources not only in outlying suburban areas but from Detroit and even Chicago and New York. Accordingly, the market for shopping goods does not have a finite boundary, but it is desirable, nevertheless, to delimit a hypothetical market for more detailed study. First the inflow and outflow of GAF expenditures and sales in a five state region is studied as it influences what works out to be the hypothetical market, namely, the eight counties contiguous to Lansing. Then the metropolitan area is analyzed and finally the CBD.

Map A compares graphically the eight county market area's GAF expenditures and sales with the GAF sales of Michigan in metropolitan and near metropolitan areas and the balance of the state. Lansing's eight county area is outlined in red. Lansing's grey circle represents the GAF sales



ECONOMIC STUDY OF LANSING RETAIL TRADE AREA  
for the  
LANSING DOWNTOWN DEVELOPMENT COUNCIL, INC.

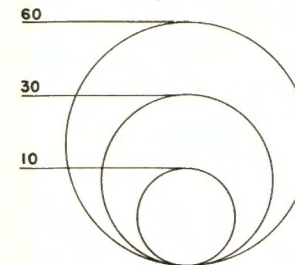
by  
J. & G. DAVERMAN CO.,  
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NOVEMBER 1958

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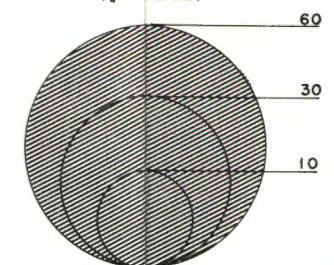
LANSING AREA & THE STATE GAF SALES

SCALE

GAF EXPENDITURES  
(\$ MILLION)



GAF SALES  
(\$ MILLION)

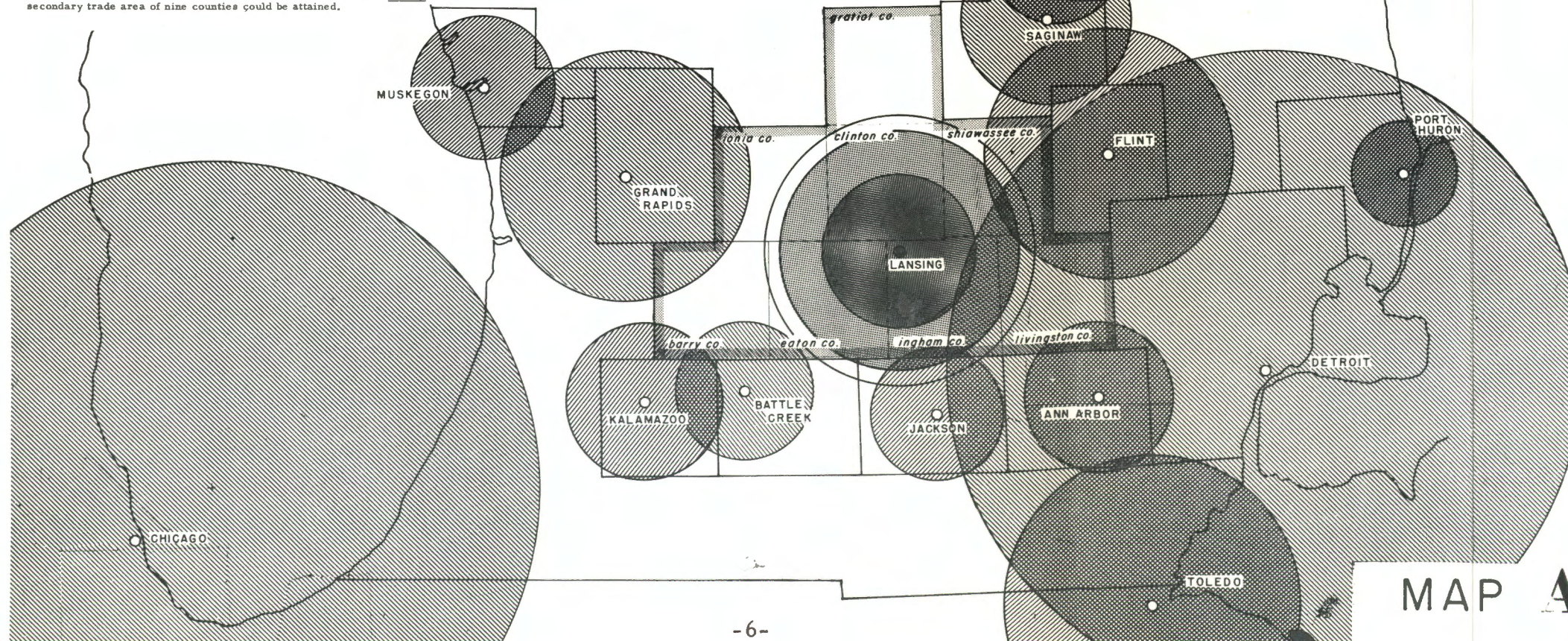


DESCRIPTION - MAP A

This chart compares the eight county Lansing area GAF expenditures and GAF sales with that of GAF sales of Michigan metropolitan and near metropolitan areas and balance of the State of Michigan referred to as Outstate on top of the map. The eight county area is shown in outline. The open circles centered on Lansing and Traverse City (approximately) indicate available consumer GAF expenditures for the Lansing eight county area and Outstate. The respective shaded interior circles as well as all other shaded circles including that of Chicago and Toledo indicate GAF sales on the same scale (Chicago slightly reduced). The smaller darker portion of Lansing's shaded circle corresponds to Lansing's CBD GAF sales.

The scale is such that the circular areas are proportional to expenditures and sales. The radii of the circles are proportional to the range of influence. Because of non-central position of the Detroit and Chicago circles their range is more likely to extend through Bay City - Lansing and Grand Rapids - Battle Creek respectively. Outstate sales are inflated somewhat by seasonal business, namely, summer and winter resort and hunting and fishing from interstate and metropolitan areas.

Without the competition of adjacent metropolitan and near metropolitan areas Lansing GAF sales may have been easily 25% or so higher. Under such circumstances and for its size a primary trade area and a strong secondary trade area of nine counties could be attained.



MAP A



in the eight county market area rather than just the metropolitan area. Note that the Lansing eight county area's \$107 million is nearly as great as Grand Rapids \$114 million GAF sales. The darker inner circle in the Lansing area represents the CBD GAF sales.

The balance of the state or outstate sales are indicated in the circle at the top of the map (centered on Traverse City) but it actually represents sales distributed throughout the state other than in the areas shown by the circles in the lower part of the state. Also indicated, geographically, by a larger circle, the influence of Chicago on this area.

It can be seen from Map A that Lansing is uniquely located in the center of a horseshoe shaped high density industrial belt. This horseshoe belt starts to the north east with Bay City - Saginaw and circling clockwise through Flint, Detroit (which has a direct influence or pull about nineteen times greater than Lansing's eight counties), and Port Huron (a minor satellite of Detroit). Then continuing in a southerly direction clockwise through Ann Arbor, Jackson, Battle Creek, Kalamazoo then northerly to Grand Rapids and Muskegon. The open end, so to speak, of the horseshoe, would be Montcalm and Gratiot counties.

Now, by means of a simple application of Reilly's Law of Retail Gravitation\* the flow of expenditures to Lansing's metropolitan area can be computed and the CBD from outstate, seasonal interstate and from surrounding metropolitan areas and contiguous counties. A brief explanation of Reilly's law is:

\* "The Law of Retail Gravitation" by Wm. J. Reilly, PHD, published by Pillsbury's Publishers, Inc.



"Two cities attract retail trade from any intermediate city or town in the vicinity of the breaking point, approximately in direct proportion to the populations of the two cities and at inverse proportions of the square of the distances from these two cities to the intermediate town."

The application of this method determines the hypothetical Lansing retail market for a more detailed study. The market thus determined is the eight county area outlined in red on Map A. Table I tabulates the result of the GAF expenditures accruing to Ingham County (the census' standard metropolitan area), and the CBD.

TABLE I - Flow of GAF Expenditures from the state (million \$) to Ingham County and CBD

(1)	(2)	(3)	(4)	(5)	(6)
County and Urbanized	1958	1970	% Inc. 58/70	1980	% Inc. 58/80
"Revised Lansing metro* expend.	\$64.9	\$96.7	49%	\$121.6	88%
Less outflow to other areas	6.7	7.6	13%	8.3	24%
GAF expenditures to "Revised metro stores"	58.2	89.1	53%	113.3	95%
Inflow from outstate seasonal inter- state and balance of 8 county area	10.3	12.2	18%	14.8	44%
Total GAF expenditures to revised metro area	68.5	101.3	48%	128.1	87%
CBD share from "revised" metro	33.3	51.5	55%	59.5	79%
CBD share from Outstate, seasonal interstate and balance of 8 county	6.9	8.9	29%	9.8	42%
Total est. CBD GAF sales	40.2	60.4	50%	69.3	72%

\*Ingham County plus contiguous urbanized area in Eaton and Clinton Counties.

Table I indicates GAF expenditures accruing to the revised metro area of \$68.5 million and to the CBD of \$40.2 million. In this instance, these expenditures are also the GAF sales. The above table also shows estimates of projected flow of expenditures for 1970 and 1980 with percentage increases. This data is used later when considering a possible expansion plan for the CBD to accommodate this retail growth.

#### LANSING URBANIZED AREA - SOURCE OF EXPENDITURES

To study this area the first step is to delimit certain economic areas containing a known population with known incomes, from which is determined the GAF expenditures. Also established is the center of gravity of population of these economic areas so that the travel time can be determined in minutes to the various business centers and to downtown, before and after recommended improvements are made in traffic flow. Eleven areas, E1 through E11, have been delimited as shown on Map B and listed in Table II.

The sources for this information are unpublished 1950 census tract data, Planning Commission tabulations, field studies, detail examination of aerial and other photographs.

These eleven areas comprise what is called the "revised metropolitan area" which is the census' standard metropolitan area - Ingham County, plus the contiguous urbanized areas in Eaton and Clinton Counties.



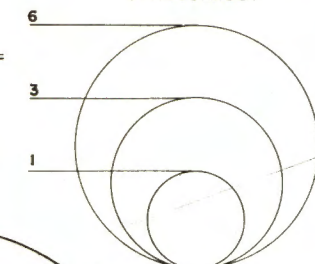
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LANSING CU'S AND GAF EXPENDITURES  
SCALE

NUMBER OF CU'S  
(THOUSANDS)



GAF EXPENDITURES  
(\$ MILLIONS)

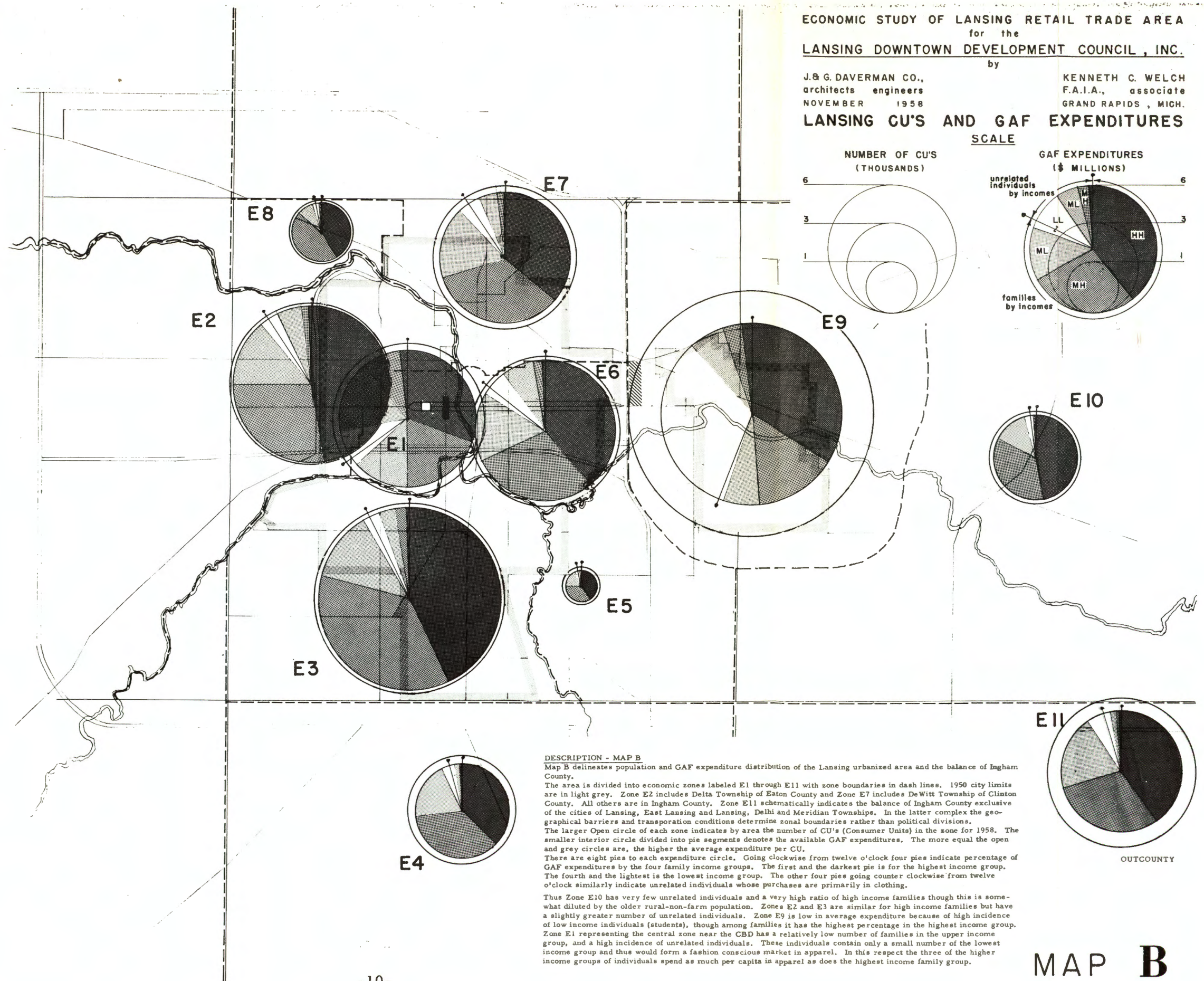
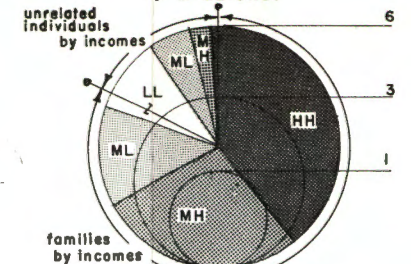




TABLE II - CU's GAF Expenditures and CBD GAF sales (in \$000) - 1958

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Zone		No.	GAF	Total	To	C.	B.	D.	Time
(Map B)	Location	CU's	Exp/CU	GAF Exp.	GAF Exp.	%of (3)	No. CU's	%of (8)	dist. min.
E1	Central	7,920	\$845	\$ 6,700	\$5,480	82	6,500	19.0	6.1
E2	West	9,435	920	8,690	5,460	63	5,950	17.4	10.4
E3	South	12,395	950	11,770	6,700	57	7,060	20.7	13.5
E4	Delhi	4,070	765	3,120	1,850	59	2,400	7.0	19.7
E5	SE	490	775	380	240	49	240	.7	14.5
E6	East	7,980	880	7,030	3,210	46	3,680	10.8	9.0
E7	North	7,385	835	6,160	2,600	42	3,210	9.4	11.7
E8	Airport	1,235	975	1,205	810	67	828	2.4	16.5
E9	E. Lansing	20,930	565	11,843	4,370	37	1,085	3.2	15.3
E10	Okemos etc.	2,955	850	2,510	1,020	41	1,210	3.5	14.2
E11	Out County	7,710	720	5,540	1,430	26	2,010	5.9	22.4
Total		82,505	\$785	\$64,948	\$33,170	51	34,173	100.0	15.0

Map B is a graphic representation of the data in Table II. The outer open circles, by their area at the scale indicated, show numbers of CU's in 1958 in the various economic areas as listed in Column 3. The inner grey circles indicate GAF expenditures made by these CU's as shown in Column 5. The more equal the two circles, the greater the average expenditures per CU. For example, area E3, south of downtown (it has 15% of the CU's in the county and 18.2% of the GAF expenditures) spends 57% of its total GAF expenditures downtown. Note the inner circle in area E3 is just slightly smaller than the outer. On the other hand it is evident at a glance that E9, East Lansing, has the lowest GAF expenditure per CU, only about 60% as much as E3.



The grey toned inner circles also show number of families and the pies show the four income groups, starting at 12 o'clock rotating clockwise. The unrelated individuals are also shown by income groups starting at 12 o'clock and rotating counter clockwise.

It is interesting to note the high incidence of individuals in East Lansing E9 and the high percentage of low incomes. This reflects the student population. The high incident of individuals in the central area, many whom are in the CBD labor force, is characteristic of all cities. Note the high percentage of higher income families in E2 and E3 to the west and south of downtown. These two areas with over 28% of the total areas CU's and over 31% of the total areas expenditures contribute over 36% of the downtowns GAF sales. That is why improvement of the access to downtown from these two areas is so important.

The data also tell us approximately on what streets the downtown retail customers will travel. Column (8) converts GAF expenditures into number of CU's by taking into account the varying expenditures per CU. Using the total number in the eleven areas as 100%, Column (9) lists the percentage in any one area so that it is a simple matter to determine how they will normally and naturally approach downtown. Assuming that half of the out county (E11) customers, who contribute 17% of the CBD GAF sales, will arrive on Grand and half on Capital Avenue, this data shown that 62.5% of the downtown customers will use Capital Avenue upon reaching downtown and 37.5% will use Grand. This is helpful information in locating the most convenient retail car parking areas and reduce cruising



in search of parking to a minimum.

#### LANSING URBANIZED AREA - SALES CENTERS

The GAF sales have been estimated in 12 concentrations or centers (plus out county) including the CBD, Frandor, East Lansing, a number of scattered centers in the city, in the townships and in the seven contiguous counties for 1958. Also listed are selected total GAF sales by main civil divisions from the retail census of 1948 and 1954, and from Sales Management for 1950 and 1958 in Table III. The total figures for 1958 are from Sales Management, but the detailed figures by city centers, etc. have been estimated from field studies, a detailed study of the Bell Telephone listings, aerial reconnaissance, and by information given by various individuals. These are given in Table III and shown graphically on Map C. The grey circles are GAF sales located geographically by concentrations as listed in Column (1) in Table III with the center abbreviations as listed in Column (2).

This table shows certain significant changes. First the CBD GAF sales were 18% less in 1958 than in 1954 due to the Frandor development. In the same period the city, outside of the CBD (before Frandor was annexed to the city) gained \$1,890,000 or 47% in GAF sales or 11.7% average per year. The total city because of the CBD's loss, lost 2.6% average per year in GAF sales, whereas it had gained 5% per year in the 1948 - 1954 period. This loss



TABLE III

GAF Sales (\$000) Growth for Lansing Area  
and Ingham Co. Details

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Location	Map C Abbrev -ation	1948	1950	1954	1958	% Yearly Growth 48-54 54-58	
CBD	cbd			47,500	40,200		-3.8
City North	noc				1,520		
City West	wec				550		
City South	soc			4,010	1,750		
City East	eac				2,080		
City less CBD subtotal				4,010	5,900		11.7
Lansing City subtotal		39,650	43,600	51,510	46,100	5.0	-2.6
Frndor	frn	-	-	-	15,000		
East Lansing	elg	1,330	1,740	2,550	2,700	15.3	1.5
Lansing Twp:							
North Misc.	nom				240		
NW Misc.	nwm				90		
West Misc.	wem				370		
South Misc.	som				100		
Meridian Twp.	mrn				240		
Delhi Twp.	del				440		
Balance of Ingham Co.	inm				2,820		
Subtotal Ingham Co. (Less City, frn & elg)		2,740	3,260	4,380	4,300	10.0	-0.5
Ingham Co.		43,720	48,600	58,440	68,100	5.6	4.2
Gratiot Co.		4,720	4,800	5,000	6,200	1.0	6.0
Ionia Co.		3,830	4,000	4,200	4,600	1.6	2.3
Clinton Co.	dew*	2,210	2,400	2,670	3,200*	3.5	5.0
Shiawassee Co.		7,950	8,800	10,480	11,900	5.3	3.4
Livingston Co.		2,380	2,800	3,710	4,500	9.3	5.3
Eaton Co.		3,640	4,000	4,720	5,400	5.9	3.6
Barry Co.		2,320	2,600	3,070	3,200	5.4	1.1
Area Total		70,770	78,000	92,290	107,100	5.1	4.1

\* Includes DeWitt Twp. at 400 indicated as "dew" on Map C.



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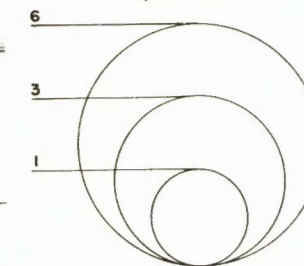
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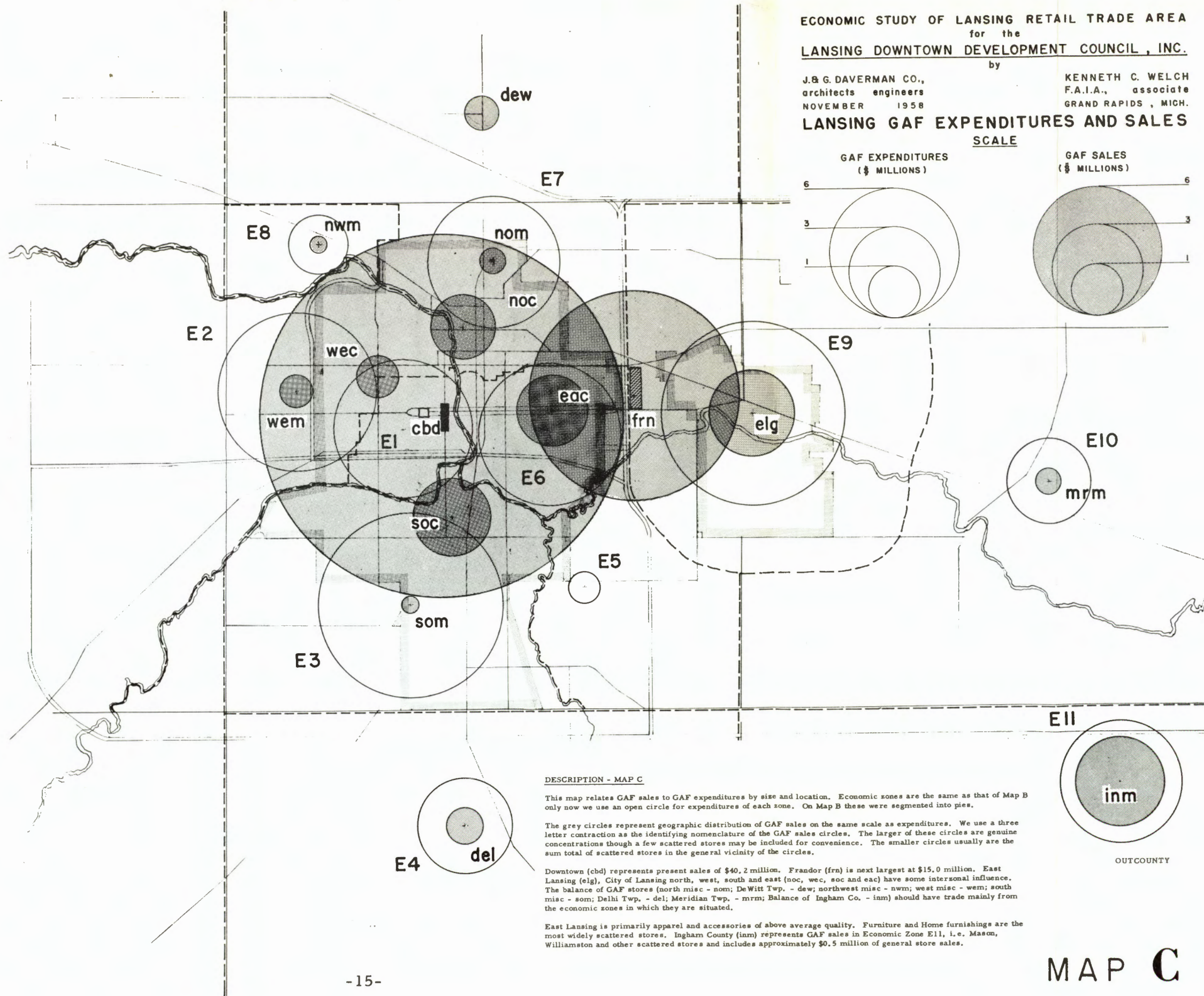
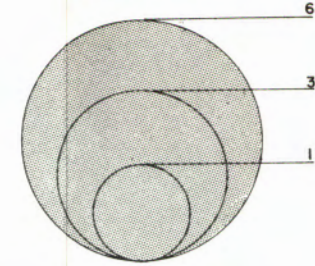
LANSING GAF EXPENDITURES AND SALES

SCALE

GAF EXPENDITURES  
(\$ MILLIONS)



GAF SALES  
(\$ MILLIONS)



DESCRIPTION - MAP C

This map relates GAF sales to GAF expenditures by size and location. Economic zones are the same as that of Map B only now we use an open circle for expenditures of each zone. On Map B these were segmented into pies.

The grey circles represent geographic distribution of GAF sales on the same scale as expenditures. We use a three letter contraction as the identifying nomenclature of the GAF sales circles. The larger of these circles are genuine concentrations though a few scattered stores may be included for convenience. The smaller circles usually are the sum total of scattered stores in the general vicinity of the circles.

Downtown (cbd) represents present sales of \$40.2 million. Frandor (frn) is next largest at \$15.0 million. East Lansing (elg), City of Lansing north, west, south and east (noc, wec, soc and eac) have some intersonal influence. The balance of GAF stores (north misc - nom; DeWitt Twp. - dew; northwest misc - nwm; west misc - wem; south misc - som; Delhi Twp. - del; Meridian Twp. - mrm; Balance of Ingham Co. - inm) should have trade mainly from the economic zones in which they are situated.

East Lansing is primarily apparel and accessories of above average quality. Furniture and Home furnishings are the most widely scattered stores. Ingham County (inm) represents GAF sales in Economic Zone E11, i.e. Mason, Williamston and other scattered stores and includes approximately \$0.5 million of general store sales.



from 1954 to 1958 can well be, in part, due to the fact that instead of the single dominant pull of one large CBD center, the pulling power was split. In other words two shopping goods centers, even with Frandor producing only about 37% of downtown's GAF sales (or pull) do not produce the cumulative pull they could exert were they together.

East Lansing's annual dollar gain of 15.3% yearly gain 1948 to 1954 was reduced to 1.5% after Frandor opened. Note also that the annual gain in GAF sales for the entire period was comparatively constant at 5.6% to 4.2%. This was largely due to increased prices in this period.

Map D shows the major thoroughfares and the space between the dots indicate one minute driving time. Table II, Column (10), shows these driving times.



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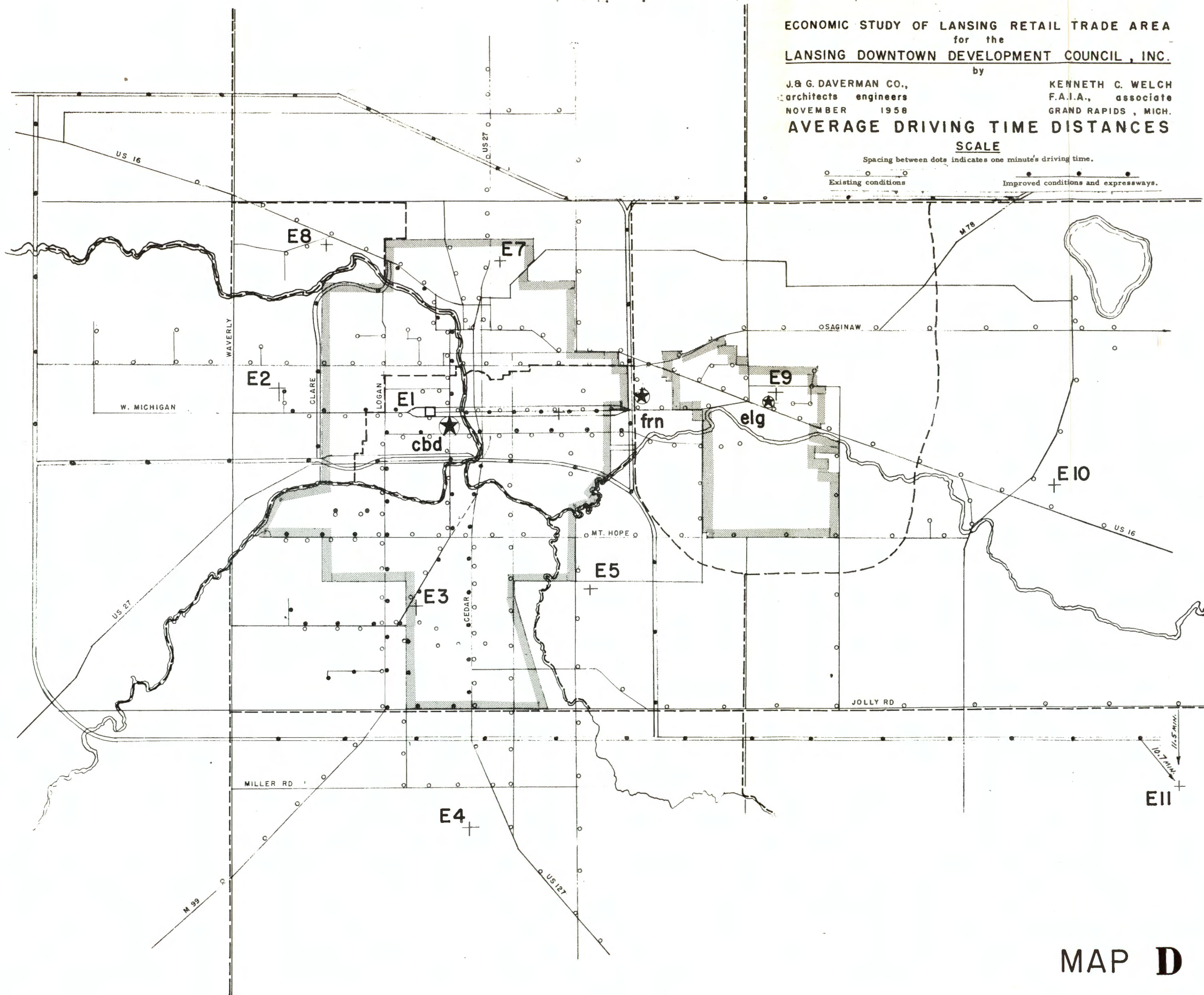
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AVERAGE DRIVING TIME DISTANCES

SCALE

Spacing between dots indicates one minute's driving time.

Existing conditions Improved conditions and expressways.



MAP D



### III - STATE OF MICHIGAN OFFICE EMPLOYEE SURVEY

This study had a number of objectives. First, the state administration wanted a guide to help them determine where they should construct their future state office buildings which would replace, in part, the office area now rented in commercial buildings in the CBD. The question was whether they should be adjacent to the present offices or be built in the suburbs. They were interested in what means of transportation the office workers use to come to work, where they lived, and other economic and social characteristics. State administration officials who were consulted, made constructive suggestions, approved the questionnaire as used, and co-operated in its use.

A second purpose was, if the results of the study were such that it appeared to be to the advantage of the state to keep their offices downtown, to what extent would this create a captive market and how much would these workers contribute to downtown retail sales.

Third, this study sought to examine shopping behavior and shopping attitudes with regard to the following factors: frequency of shopping downtown and elsewhere, motivations in shopping in the CBD, what stores were patronized for what kinds of merchandise, opinions as to best stores for fashion apparel, location and number of charge accounts, amount of shopping out of town and use of mail order, use of the Civic Auditorium and other characteristics.



## METHOD

The data was obtained by personal interview from a cross section of state employees in the following state buildings with the following number of employees in each.

Capital Building	310 Employees	10.0%
Lewis Cass Building	1,061 Employees	34.6%
Stevens T. Mason Building	<u>1,700</u> Employees	<u>55.4%</u>
Total	3,071 Employees	100.0%

The four page questionnaire used is reproduced herein. There were 253 respondents, or an 8.2% sample of the total number of employees in the three buildings.

A random selection was made in each building by number based on the percentages above and by the relative number of men and women in each division and a balanced cross section by ages, to the extent that this could be done through consultation with department heads and by a careful visual selection. While this process meets requirements of probability sampling, the sampling error can be great in cases where the responses are low in number in which case only a general relationship should be considered. For example, when a given store was mentioned, for example two times, it can only be roughly compared in its appeal to the store that was mentioned, for example, fifty times. This does not mean that the one store has twenty five times the acceptance of the other, but it does indicate that it has a much greater acceptance. Stores that are not mentioned, or mentioned but a few times might have been mentioned more times, had the sample been greater.



## LOCATION OF STATE OFFICE BUILDINGS

The important question for the state administration was the office workers opinion as to the advantage to them of working close to downtown. Seventy-nine per cent said there was an advantage. Fifty-nine per cent of the women and forty-eight per cent of the men said that it was a "great advantage", fourteen per cent said it was not important, and only seven per cent said that it was a disadvantage. About nine per cent would prefer a suburban location. The advantages to being near the CBD were: thirty-eight per cent because of the ease of shopping, thirty per cent because of convenience (part of which could be referring indirectly to shopping convenience), ten per cent mentioned it was convenient for business or service contacts and nine per cent said it was near home. Fifty-five per cent named traffic congestion and thirty-three per cent parking difficulties as the main difficulty in working downtown.

Sixty-eight per cent traveled to work regularly in their own car, twenty-one per cent rode with others, eight per cent walked, and only three per cent used public transit. Undoubtedly if state employees were to pay a parking fee, their use of the transit system would increase. Eighty-five per cent own an automobile and only ten per cent do not know how to drive. In only four per cent of the families, no member of the family knew how to drive.

Also, relative to the question of "how long it took them to get from their home to the office", seventeen per cent did it in less than five minutes, twenty-eight per cent from five to ten minutes, twenty-four per cent from ten to



fifteen minutes, eighteen per cent from fifteen to twenty minutes, four per cent from twenty to twenty-five minutes and nine per cent over twenty-five minutes. As a result of an analyzation of this portion of the survey, we revised our time distance in travel data increasing the average driving time from the center of the economic areas to the CBD from fourteen to fifteen minutes.

Relative to the question of "how much longer it takes to return home", the average was 3.5 minutes, which indicates the extent of the more difficult traffic problem during the late afternoon rush hour.

#### CONTRIBUTION OF STATE EMPLOYEES TO CBD SALES

The results of the shopping habits show a high percentage of office workers shopping at noon and at night; we estimate conservatively that ninety per cent of the downtown office workers are regular customers of the CBD. We also conservatively estimate that these ninety per cent spend seventy per cent of their General merchandise and Apparel (GA) expenditures in CBD stores. In other words, we can say that sixty-three per cent of the expenditures of the CBD office work force go to CBD GA stores.

There are 3,071 state employees at 116 sq. ft. per employee in the three state office buildings. The state also rents 160,000 ft. in commercial office buildings of the CBD or a grand total of 515,373 sq. ft. At 116 sq. ft. per employee there would be 4,450 state office workers downtown. Only 0.4% earned less than \$3,120 dollars per year; 34.2% had annual total incomes (from all sources) from \$3,120 to \$5,200; 20.1% from \$5,200 to \$7,000; 29.3% from \$7,000 to \$10,000 and 16% over \$10,000. This is an average income for all the state employees of \$6,925.00 per year. We assume that this was greater than the other office employees in the CBD and conservatively estimate their average income to be \$4,950.



Based on the above data, we estimate that the state office workers expended \$940 per year in GA stores, and the other office workers only \$760. Accordingly, the state office workers spent \$2,630,000 a year in CBD, GA stores. The other downtown office workers in 340,000 sq. ft. at 120 ft. per employee with 56% of their GA expenditures in downtown stores would give a total expenditure for all workers of \$3,835,000 or 12.2% of the \$31,400,000 GA sales in the CBD. The proportion of women to men is somewhat lower for non state office workers. Hence the 56% estimate.

#### SHOPPING BEHAVIOR AND ATTITUDES

Thirty-eight per cent of the respondents regularly brought their own lunch. Thirteen per cent patronized the state cafeteria, 18% went home for lunch. (32% of the men), 17% ate in a CBD restaurant, 3% in a drug-store, and 1% in a variety store.

Fifty-nine per cent shopped regularly at noon, 32% did occasionally and only 9% did not. Seventy-four per cent had shopped at noon within the last week, 82% within two weeks, and 87% within the last three weeks. It is possible that the CBD workers who shopped more than once in a week at noon, did not spend as many dollars per trip in the 30 or 40 minutes available time, as when they returned to shop in the evening. But the noon trips are important to the dollars spent at night. Sixty-nine per cent of the respondents shopped downtown in the evening. Sixty-four per cent had done so in the past two weeks. The fact that only 28% ate dinner downtown shows that the majority of the state employees drove home (21% in car pools) and returned after dinner to shop.



The question has arisen, "Should the downtown stores remain open later in the afternoon to permit more office workers to shop after hours". The fact that so many prefer to go home to eat, in a way answers this question. Probably the real answer is that when downtown takes on more of the basic characteristics of the outlying center with more night openings, more CBD workers will return to shop in the evenings.

Ninety point nine per cent of the respondents said that they cashed their pay check downtown presumably in a bank or store. Six point seven per cent cashed them in the suburbs and only 2.4% in the Treasurer's office. This is again an indication of the importance of the downtown to these workers.

In answer to the question "When did they last shop at Frandor?": 37% said they had done so in the past week. This can be compared with 74% who shopped downtown at noon in the past week, and also 28% who said they shopped downtown in the evening within the past week. Fifty-three percent had shopped at Frandor in the last two weeks, 59% in the last three weeks and 72% within one month.

Respondents gave 204 reasons, "what they went to Frandor for". The answers were:

17%	Food
16%	General merchandise
33%	Apparel
10%	Furniture and home furnishings
14%	Building, hardware
5%	Toys
5%	Services

The same questions about Frandor were asked about the East Lansing shopping section. Of 107 reasons the answers were:



6%	Food
10%	General merchandise
73%	Apparel
3%	Gifts
2%	Cosmetics
4%	Books

Time interval of visits to East Lansing were as follows: 12% of the respondents said within a week, 17% two weeks, 20% three weeks, 23% within a month.

In answer to the question, "what shops they thought were best for fashion apparel", a number of workers mentioned more than one store. The results of this question were: Maruice 103, Style Shop 76, Knapp's 71, Greens 63, Jacobson's 39, Arbaughs 34, San Souci 19, Smalls 17, Kosticheks 17, Gurds 13. Three indicated that all stores were good and 10 said that there were not any good fashion apparel stores. Again in considering the answers, the distance from the office to the store must be considered and especially when a store such as Jacobson's is in East Lansing. Also it is natural that men's stores would have fewer mentions.

Question, "Within the past year have you purchased fashion apparel and home furnishings in another city?", 37% said yes, 63% no. The number who had purchased in another city from 169 items mentioned (of which 145 were apparel and 20 in the home furnishings group), 132 of the 169 items were purchased within the state, 56 in Detroit, and 38 in other metropolitan areas; 27 in the surrounding seven county areas, 7 in Chicago and 4 in New York City. Thirty-seven percent said that they made purchases by mail.

In answer to, "What kind of stores would you like to see added to downtown?", 2% of the respondents said tall girls shop, 6% wanted "better" apparel



stores, 10% shoes, 7% childrens, and 35% were satisfied. Six percent mentioned "another department store". Seven percent would like to see more better restaurants and some mentioned "department store tea rooms" and short orders. Five percent suggested delicatessen type food stores. Four respondents mentioned the need for a nursery and hobby-pet type of stores.

Ninety-seven percent of the respondents stated that they read the State Journal regularly, 59% the Detroit Free Press and 3% the Detroit News.

In general, 18% complained about the parking and 3% mentioned they would like better bus service. Three percent said the sales service was bad at noon (due to lunch hour shifts probably). Two respondents said they would like to see better layaway service.

The Civic Auditorium does not play an important part in their lives. Twenty-five percent of the respondents attended a function there in the past year, but 18% only twice and 24% only once. Many could not recall what they had attended.

The women are, of course, the important shoppers for shopping goods. It has been estimated that 80% to 85% of this type of merchandise is purchased by women. Eighty-four percent of the respondents are women, 16% men.

All respondents were asked, "Where did you last buy a \_\_\_\_\_?" A selected list of 30 items were used and the respondents indicated where they had last purchased these items for themselves or daughter(s) or husband. The tabulation and results by percentages of the answers of these questions are shown in Table IV, which lists 43 stores or groups of stores that were mentioned, if only once, and also the number of times out of town and Detroit were



State Office Questionnaire Survey - Location of last purchase of specific items in terms of % of total respondents

No. Mentions % Respondents	By women for themselves										For a daughter						For husband or by a single man						For a son						Charge Accts.			
	House Dr.	Coat	Dress	Hosiery	Shoes	Millnry	Cosmtcs	Cost. Jwrlry	Beauty Shp	Coat	Dress	Shoes	Socks	Undrwr	Play Clo.	Toys, etc.	Suit	Shirt	Tie	Shoes	Hose	Sprt Coat	Slacks	Suit	Coat	Pants	Play Clo.	Shoes		Undrwr	Toys Etc.	
	143	216	231	225	212	188	195	173	148	75	65	34	72	72	65	50	165	173	142	146	152	122	149	41	59	65	51	63	63	48	822	
	57	85	91	89	84	74	77	68	59	30	26	33	28	28	26	20	65	68	56	58	60	48	59	16	23	26	20	25	25	19		
Knapps	50	24	46	72	64	53	101	86	21	15	14	24	19	26	13	12	26	67	42	29	44	22	35	5	7	11	8	16	15	10	170	
Arbaughs	14	31	17	28	17	25	19	33	20	5	1	8	9	14	7	6	19	19	14	12	18	9	8	7	14	16	9	8	9	2	142	
J. C. Penney	11	7	4	37	--	1	---	1		10	4	7	15	12	9	2	4	14	4	--	18	2	9	4	8	14	14	2	21			
Sears	7	2	4	11	6	2	2	1		11	11	10	9	7	9	11	8	12	12	12	16	9	7	2	6	8	10	6	9	8	47	
Lansing Dry Goods		5	2	2		1				2	1				2															1	3	
Greens	13	34	29	4	4	1	1	1		10	2	--	--	--	3	1															48	
Maurice	9	33	30	3	10	16		--		2	6	2	--	--	2																76	
Style Shop	7	27	38	11	8	13		14		--	1	--	--	--	2																67	
Sans Souci	2	5	22	1	--	--	0	2		1	2	--	--	--	2																25	
Vogue	2	8	2	--	--	--	0	--		--	--	--	--	--	--																3	
Jacobsons	3	7	9	4	6	7	1	2	5	5	7	4	5	3	4									5	3	3	2	2	2		41	
Federal	1	3	3	4	--	--	1	--		3	2	1		1	5	1				1	1	--			1	1	1	--	1		9	
Drug store						24																										
Variety Store				4			8						5			4													1	4		
Grants													2	1					1	1											3	
Mills Dry Goods																																17
Neumode				10									3																			
Sibyl						49																										
Barker				4	20							6																				1
Baker				1	13							2																				1
Shepard's					12							2								13	3						2				10	
Rackley					9							--								2							3				4	
R & H												7																				--
Harryman					12							5								20	4						5				11	
Thom McAn												--								14	3						5				--	
Modern Youth												5																1				
Leibermans																																8
Siegles		1						5																								4
Kositchek																	33	15	19	17	14	33	28	10	10	5	3	3	2		24	
Smalls																	8	16	12	1	6	12	10	2	2	1	1	1	--		16	
Richmans																	16	3	1	--	2	2	6	3	4	1	0	--	--		9	
Brooks																	8	2	4			6	7	--	--	0		--	--		5	
Hurds																	15	11	12	4	7	11	13	1	--	0	1	--	--		14	
Robert Hall										1	1						2															--
2 Legs																	3	1														
Vandervorts																5																
Trumbells									23																							
Olds Hotel									19																							
Josephs									7																							
Avon Cosmetic							22																									
Childs Center										4				3	4														1	1	2	
Tie Rack																			7													
Frondor			1	1	1	2	2	1									4	2	6	4	4	4	3	--							3	
Out of Town	16	7	12	15	13	5	6	9		1	2	4	3	3	2	2	6	6	4	10	1	2	2	--	1	2	1	1	0	3	48	
Detroit	4	2	2	1	4	2	1	0		0	1	0	1	1	1	0	1	--	2	2	0	0	0	--	0	--	0	0	--	2	22	

TABLE IV

TABLE IV



mentioned. The last column shows the number of charge accounts by stores.

On Map E we show a dot map indicating the home location of the respondents.

### OBSERVATIONS

The size of presentation of given items helps determine the direct pull of a store. It is also evident that when a well operated apparel store is quite close and convenient to the office buildings, it attracts a greater number of customers than a store twice the distance.

The law of retail gravitation would partially apply because of the varying distances between the office buildings and the stores mentioned. It is only when the office worker shops at noon or directly after work in the afternoon, that they become captive customers in CBD stores. In this instance, the relative distance from office to store becomes important. Also it must be considered in the relatively short time that an office worker has to shop at noon, that it is difficult to make up her mind on certain high ticket items and it requires one or more return trips. Regarding the number of the respondents who said they shopped at noon and considering again the walking distances from office to stores, we have computed the center of gravity of the state employees in the three main buildings and the distance from this point to the nearest entrance in the various key apparel stores. The center of gravity is at a point about 300 feet west and slightly south of the intersection of West Allegan and South Walnut, in the civic auditorium parking field. The distance from this point to the eight key fashions apparel stores is shown below.



ECONOMIC STUDY OF LANSING RETAIL TRADE AREA  
for the  
LANSING DOWNTOWN DEVELOPMENT COUNCIL, INC.

by  
J. & G. DAVERMAN CO.,  
architects engineers  
NOVEMBER 1958

KENNETH C. WELCH  
F.A.I.A., associate  
GRAND RAPIDS, MICH.

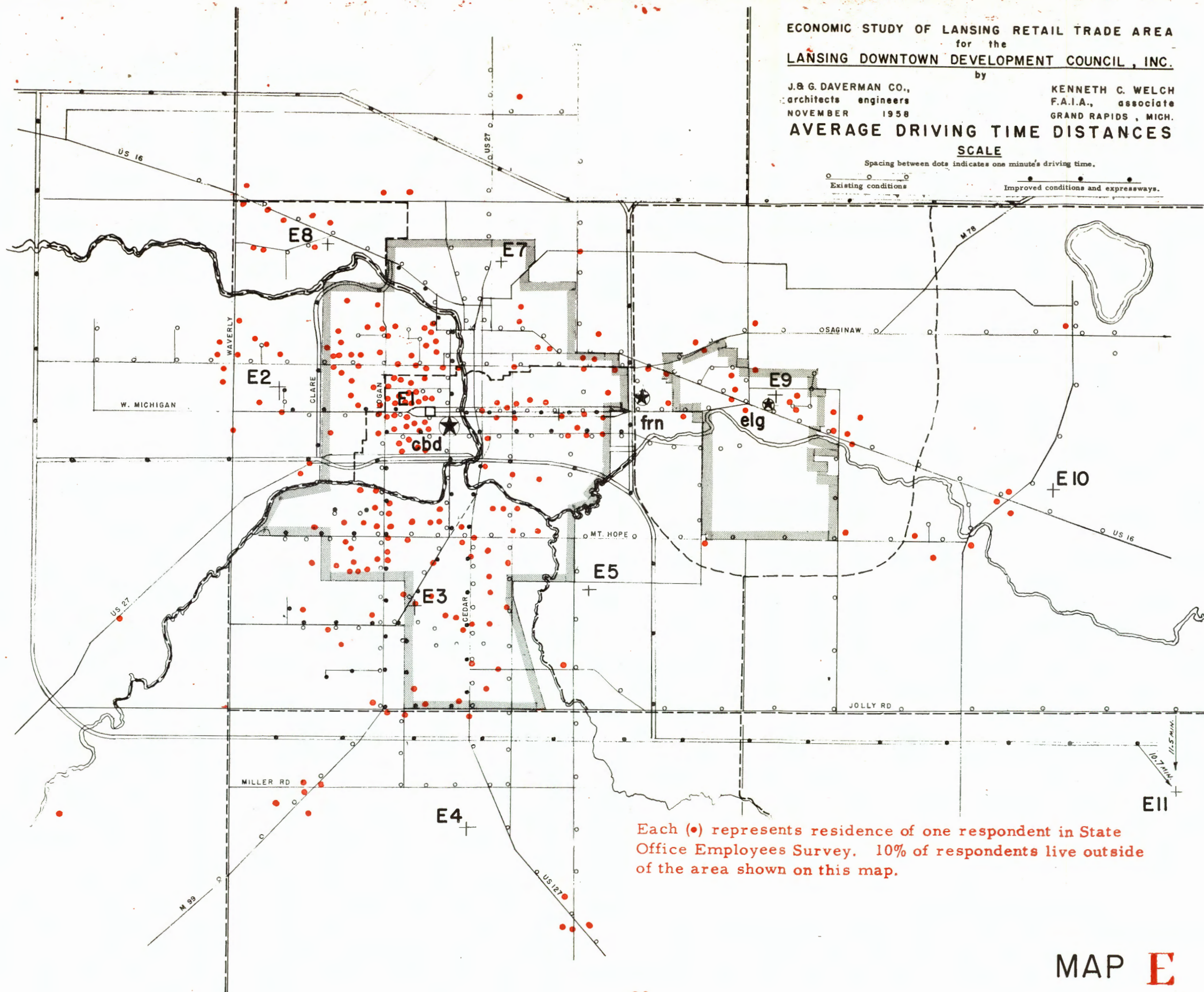
AVERAGE DRIVING TIME DISTANCES

SCALE

Spacing between dots indicates one minute's driving time.

Existing conditions

Improved conditions and expressways.



MAP **E**



The second column shows the relative distances using the distance to Arbaugh's as an index of 100.

<u>Distance</u>	<u>Index</u>		<u>Relative Frontage</u>
2880 ft.	100	Arbaugh's	100
2610 ft.	91	J. C. Penny's	34
2510 ft.	87	Vogue	8
2470 ft.	86	Sans Souci	8
2430 ft.	84	Maurice	26
2170 ft.	75	Knapp's	53
1480 ft.	51	Style Shop	26

In the last column we show the relative frontages along the most important streets of various stores as a matter of interest. This only indicates apparent relative size. It does not consider the number of floors or indicate total area. Also, the impact of a large corner store, for example, Knapp's, is obviously greater visually than frontage sandwiched in between two other buildings.



SAMPLE

QUESTIONNAIRE for STATE OFFICE BUILDING SURVEY

This questionnaire is completely confidential - we do not want your name.

- 01 Civil Service Classification \_\_\_\_\_
- 02 (1) Male \_\_\_\_\_ (2) Female \_\_\_\_\_
- 103 Years of school completed:  
(1) Finished grade school \_\_\_\_\_; (2) years of high school \_\_\_\_\_;  
(3) graduated from H. S. \_\_\_\_\_; (4) years college (business or technical) \_\_\_\_\_;  
(5) graduated \_\_\_\_\_.
- 04 Marital status: (1) Single \_\_\_\_\_; (2) Married \_\_\_\_\_; (3) Divorced \_\_\_\_\_;  
(4) Widow (er) \_\_\_\_\_; Engaged \_\_\_\_\_.
- 05 (1) How many children living at home \_\_\_\_\_; (2) How many under 12 \_\_\_\_\_.
- 06 (1) Near what intersection of two streets do you live \_\_\_\_\_ ?  
(2) Approximately how many years in this place \_\_\_\_\_ ?
- 07 Do you own your home (1) Yes \_\_\_\_\_; (2) No \_\_\_\_\_.
- 108 How long have you worked for state: (1) less than 2 years \_\_\_\_\_; (2) for 2 to 5 years \_\_\_\_\_;  
(3) 5 to 10 years \_\_\_\_\_; (4) over 10 years \_\_\_\_\_; Do you work full time (5) Yes \_\_\_\_\_  
(6) No. \_\_\_\_\_ (7) Remarks \_\_\_\_\_
- 110 Age: (1) 18 - 24 years \_\_\_\_\_; (2) 25 - 34 years \_\_\_\_\_; (3) 35 - 44 years \_\_\_\_\_;  
(4) 45 - 64 years \_\_\_\_\_; (5) over 65 years \_\_\_\_\_.
- 111 Income:  
For classification only - indicate broad range of income status - if married, combine income of husband and wife. Incomes should include salary (s), plus approximate other income such as interest on savings, dividends, pensions, rentals on owned property, etc.
- (1) Less than \$3,120 per year or \$260 per month or \$60 per week \_\_\_\_\_  
(2) \$3,120 to \$5,200 per year or \$261 to \$434 per month or \$61 to \$100 per week \_\_\_\_\_  
(3) \$5,200 to \$7,000 per year or \$435 to \$580 per month or \$101 to \$135 per week \_\_\_\_\_  
(4) \$7,000 to \$10,000 per year or \$581 to \$830 per month or \$136 to \$192 per week \_\_\_\_\_  
(5) Over \$10,000 per year or over \$831 per month or \$193 per week \_\_\_\_\_
- 112 Do you own a car (1) Yes \_\_\_\_\_ (2) No \_\_\_\_\_. Do you drive (3) Yes \_\_\_\_\_ (4) No \_\_\_\_\_.  
(5) What members of your family drive \_\_\_\_\_ ?
- 113 How do you generally come to work? (1) your own auto \_\_\_\_\_; (2) passenger in others auto \_\_\_\_\_; (3) bus \_\_\_\_\_; (4) walk \_\_\_\_\_; (5) other \_\_\_\_\_. (6) If (1) or (2) is yes, where was car parked \_\_\_\_\_ ?



- 114 (1) Approximately how long does it take you from home to office \_\_\_\_\_ ?  
 (2) To return home \_\_\_\_\_ ?
- 115 Where do you generally eat lunch? (1) Bring with me \_\_\_\_\_; (2) State Cafeteria \_\_\_\_\_;  
 (3) Restaurant \_\_\_\_\_; (4) Drug Store \_\_\_\_\_; (5) 5 & 10 \_\_\_\_\_; (6) Home \_\_\_\_\_;  
 (7) Other \_\_\_\_\_.
- 116 Do you ever shop at noon? (1) Yes \_\_\_\_\_ (2) No \_\_\_\_\_ (3) Sometime \_\_\_\_\_.
- 117 When was the last time you did shop downtown at noon? (1) within last week \_\_\_\_\_;  
 (2) two weeks \_\_\_\_\_; (3) three weeks \_\_\_\_\_; or about when \_\_\_\_\_ ?
- 118 Do you ever shop downtown in evening? (1) Yes \_\_\_\_\_; (2) No. \_\_\_\_\_; (3) If yes,  
 when was last time you did so \_\_\_\_\_; Did you eat dinner downtown?  
 (4) Yes \_\_\_\_\_; (5) No \_\_\_\_\_.
- 119 How many times in the past year did you attend a public event in the Civic Auditorium?  
 \_\_\_\_\_.
- 120 In your opinion, is the fact that you are working fairly close to downtown a (1) great  
 advantage \_\_\_\_\_; (2) some advantage \_\_\_\_\_; (3) not important \_\_\_\_\_;  
 (4) or would you prefer to be working in a suburban location \_\_\_\_\_;  
 (5) why? \_\_\_\_\_.

21 Where did you last buy a:

For yourself:

Store

Housedress \_\_\_\_\_

Coat \_\_\_\_\_

Dress \_\_\_\_\_

Hose \_\_\_\_\_

Shoes \_\_\_\_\_

Millinery \_\_\_\_\_

Cosmetics \_\_\_\_\_

Costume jewelry \_\_\_\_\_

Beauty Parlor \_\_\_\_\_

For your daughter (s):

Store

Coat \_\_\_\_\_

Dress \_\_\_\_\_

Shoes \_\_\_\_\_

Socks \_\_\_\_\_

Underwear \_\_\_\_\_

Slacks or play clothes \_\_\_\_\_

Toys, recreation \_\_\_\_\_

equipment, etc. \_\_\_\_\_

For your son (s):

Store

Suit \_\_\_\_\_

Coat \_\_\_\_\_

Pants or \_\_\_\_\_

dungarees \_\_\_\_\_

Other play clothes \_\_\_\_\_

Shoes \_\_\_\_\_

Underwear \_\_\_\_\_

Toys, recreation \_\_\_\_\_

equipment, etc. \_\_\_\_\_

For (or by) your Husband:

Store

Shirt \_\_\_\_\_

Tie \_\_\_\_\_

Suit \_\_\_\_\_

Shoes \_\_\_\_\_

Socks \_\_\_\_\_

Sport coat \_\_\_\_\_

Slacks \_\_\_\_\_



122 How do you cash your pay check ? (1) Treasurer's office \_\_\_\_\_;  
(2) downtown \_\_\_\_\_ (3) In suburbs \_\_\_\_\_

123 (1) In what stores do you have charge accounts (in or outside of Lansing) ? \_\_\_\_\_

(2) Do you pay your bills by: (1) mail \_\_\_\_\_; (2) at store \_\_\_\_\_

125 (1) When did you last shop at Frandor ? \_\_\_\_\_

(2) What did you go there for ? \_\_\_\_\_

126 When did you last shop in East Lansing ? (1) \_\_\_\_\_

(2) What did you shop for ? \_\_\_\_\_

127 What shops do you think are best for fashion apparel ? \_\_\_\_\_

128 Within the past year, have you purchased fashion apparel or home furnishings in another city? (1) Yes \_\_\_\_\_; (2) No \_\_\_\_\_

Item

City

Store

129 Do you ever make purchases by mail ? (1) Yes \_\_\_\_\_; (2) No \_\_\_\_\_

From where and for what items did you last purchase by mail:

Approximate time

What Company

Item

30 What kind of stores or services would you like to see added to downtown ? \_\_\_\_\_



- 131 What newspapers do you read regularly? (1) Lansing State Journal \_\_\_\_\_;  
(2) Detroit Free Press \_\_\_\_\_ (3) Detroit News \_\_\_\_\_;  
(4) Other \_\_\_\_\_.

NOTE: The two questions: Question 109, dealing with location of employment prior to working for the state and Question 121, which has a subdivision on food shopping, are not included herein as the locations of the answers were too scattered to give a reliable result.

Also, Question 124, dealing with the location of doctors offices, was not tabulated due to obtaining this information from another source.



#### IV - STRUCTURAL ANALYSIS

It is difficult to draw a line around a given number of blocks and say that is the Central Business District. There have been numerous unscientific methods used to define central districts and delimit various zones or sectors such as the central core, the secondary core, the peripheral or frame area, the retail area, the financial sector and the like. In 1955 Professors Murphy and Vance of Clark University made studies of nine cities and for the first time scientifically considered structural or total floor area as well as land use. This gave a three dimensional approach as compared with the single dimension of land use only. This is important in studying downtown because as we have stated the strength of downtown is its high density of floor space. The method used by Murphy and Vance to define or delimit the CBD was to identify CBD uses and non-CBD uses, and establish certain indices for measuring the intensity of the central business uses block by block.

There can be no precise final boundary for the CBD because what might be a boundary line today, as in any master plan, must change with future expansion and growth. As of today the hard core of the retail area, and the hard core of the office building - service area, a peripheral area or frame area and the capital improvement area can be delimited. The hard core areas can expand into the frame area when it is justified.

A detailed survey of some 24 blocks, computing the floor area in every building, and the area devoted to parking, etc., has been made. Some of the pertinent findings will be reviewed herein which will include area comparisons



with the average data in nine business districts in nine other cities. The detailed comparative figures in two of these, Sacramento and Pheonix which are state capitals are given and also Grand Rapids which is a competing metropolitan area in Michigan.

#### DELIMITATION OF CBD HARDCORE

From the space use data and study maps the CBD can be delimited according to the Murphy - Vance criteria and also the outline of the retail and office building hard cores of the CBD and the peripheral area and the state capital improvement area. These four areas are shown on Map F. From the data, it is evident that the present hard core of the primary retail area extends along Washington Avenue from Michigan to Kalamazoo spilling over to Ottawa on the north and including half of the block between Kalamazoo and Lenawee to the south.

While the office building core overlaps the retail core as shown on Map F, the fact that there are two well defined zones can eliminate parking demand conflict that can be very determinental to the retail core. This is one of the major difficulties in most CBD's. Lansing should in the CBD Master Plan, plan to keep these zones as separated as possible.

The theory that offices should be introduced in and be a part of retail areas because they create traffic is wrong. They do provide a desirable market but they also require parking areas that are useless for store customers. Further, the workers arrive in the Central Business District hours before the shoppers do and preempt the close in parking.

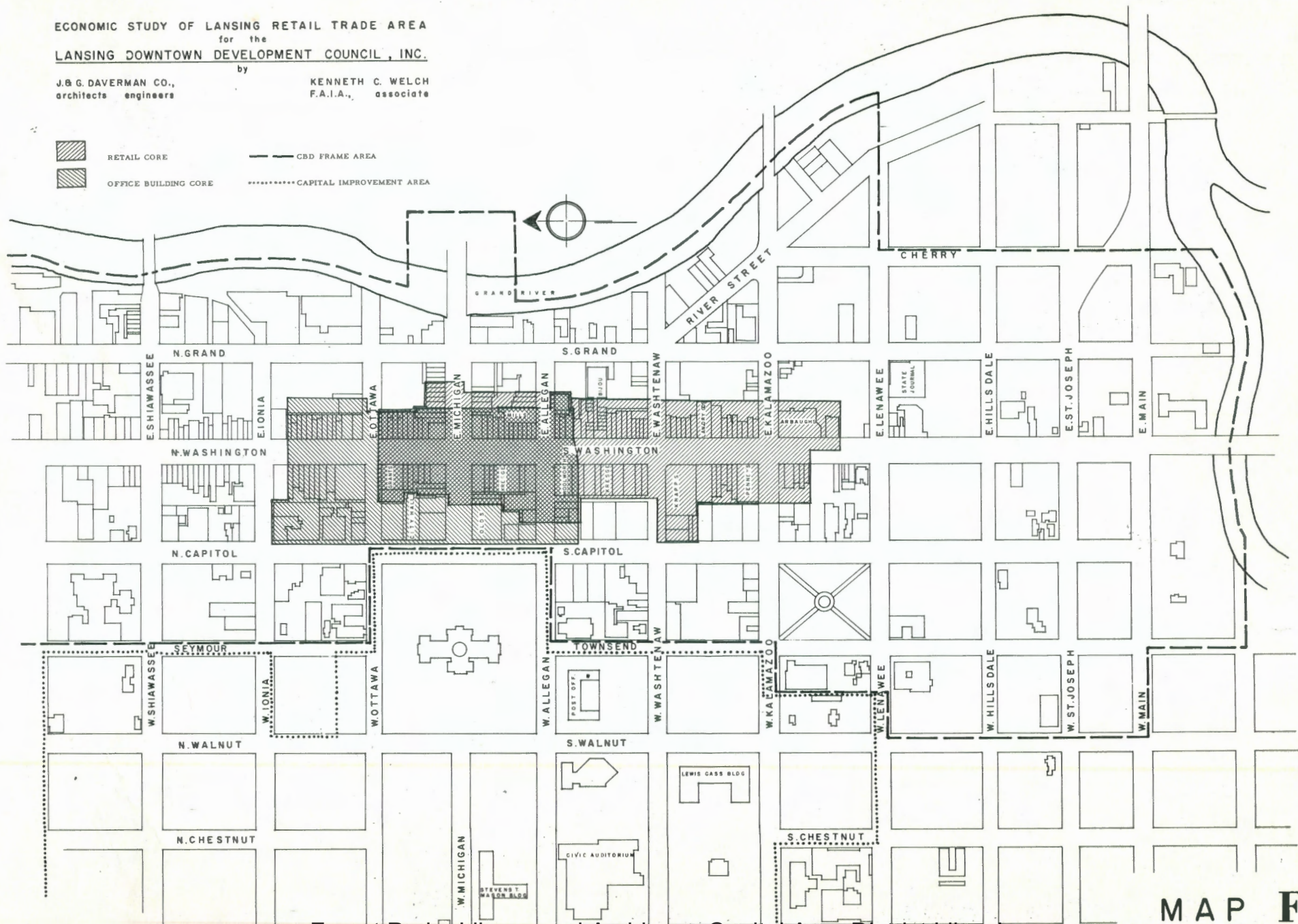
However, new offices constructed in the office building core replacing present older structures can have retail on the first floor. The new office buildings will



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F.A.I.A., associate





not only rehabilitate the sub standard area north of Michigan on the east side of Washington, but the office force that is created by the new buildings will be a captive market for and help the retail stores in the northern part of the retail core.

Lansing is fortunate in the location of its state offices with their parking to the west well away from the retail core.

The office and retail core delimitations define our detail study area and form a basis for studies of how the CBD plan relates to and can be better integrated with Lansing's Master Plan.

#### OFFICES: MAP G

This map shows the CBD office uses, governmental and commercial with an indication of the number of floors or, in a way, density of floor area. It can be noted that, exclusive of the State Office Buildings in the Capitol Improvement Area west of Capitol Avenue, that the commercial office buildings are all concentrated from Allegan to Ionia, which almost automatically establishes the office building core as we have shown on Map F. The commercial office space, totals 618,148 square feet as shown herein, of which 184,336 square feet or 30% is leased by the State and other institutional groups.

#### General Retail Uses: General Merchandise (G), Apparel (A), and Miscellaneous (Jewelry, Photo Supply, Books, etc.) Map H





The uses shown here are the backbone of the "shopping goods" retail center. While GAF (G A plus Furniture-house furnishing stores) is used as the index of shopping goods sales, it is really the GA plus the miscellaneous or the retail

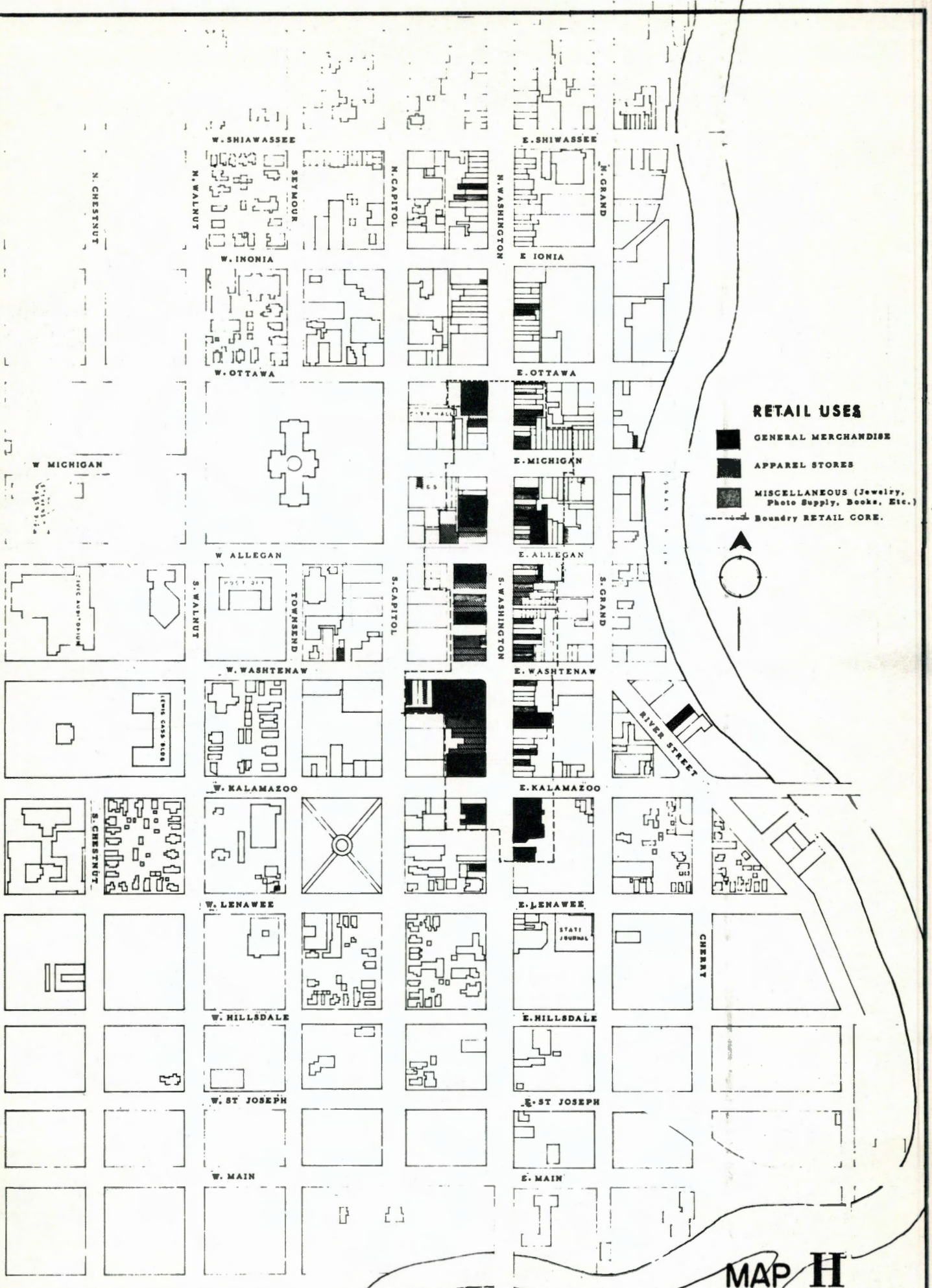






# RETAIL USES

-  GENERAL MERCHANDISE
-  APPAREL STORES
-  MISCELLANEOUS (Jewelry, Photo Supply, Books, Etc.)
-  Boundary RETAIL CORE.



MAP H



census "other stores" which produces the greatest pull, creates the maximum pedestrian traffic, and establishes the core of the "shopping goods" area. Notice on Map H how these stores are largely concentrated on Washington Avenue between Ottawa to the north and extending south to the center of the 400 block.

To reiterate: Downtown is basically a "shopping goods" center. The stores which contain DSTM (Department Store Type Merchandise) pull customers from great distances for comparison shopping and builds up a concentrated pedestrian traffic per front foot of the retail structures.

RETAIL USES: Automotive, Home Furnishings (F) and Hardware, Map I

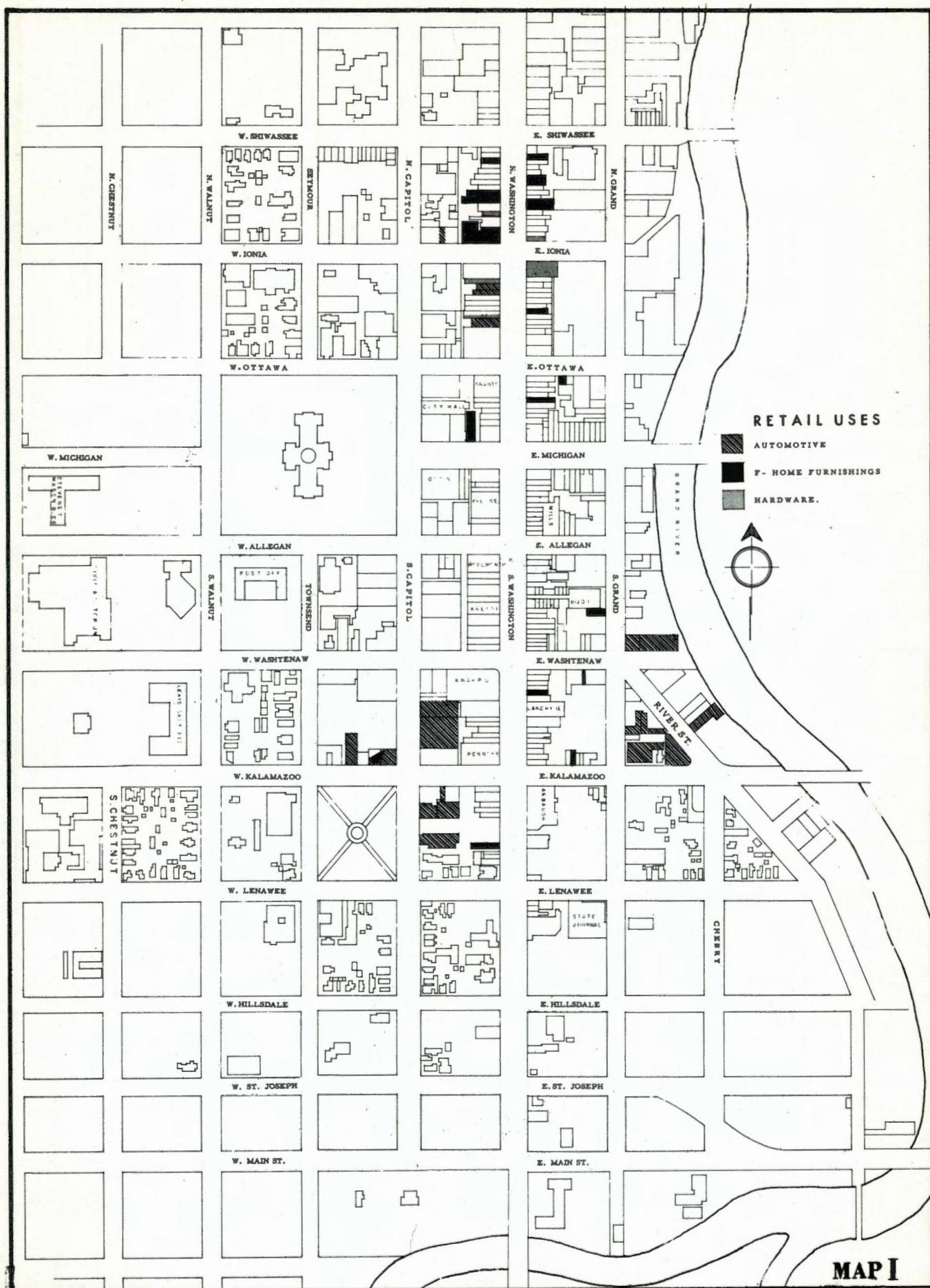
Murphy and Vance listed automotive as a CBD retail use. We feel that it does not belong in, or too close to the CBD retail core. It pulls customers from distances, especially for service, but it is more of a drive-in facility rather than a pedestrian traffic generator. It is true that some shoppers and visitors find it convenient to have their cars serviced while visiting downtown, but a small sales and pick up area close to downtown can serve this purpose.

Furniture stores are also not a great pedestrian traffic generator and are decentralizing today very rapidly. Note that there are more F stores outside the retail core than in it. Hardware stores are part of building supplies in the retail census and are in a way a convenience goods item.

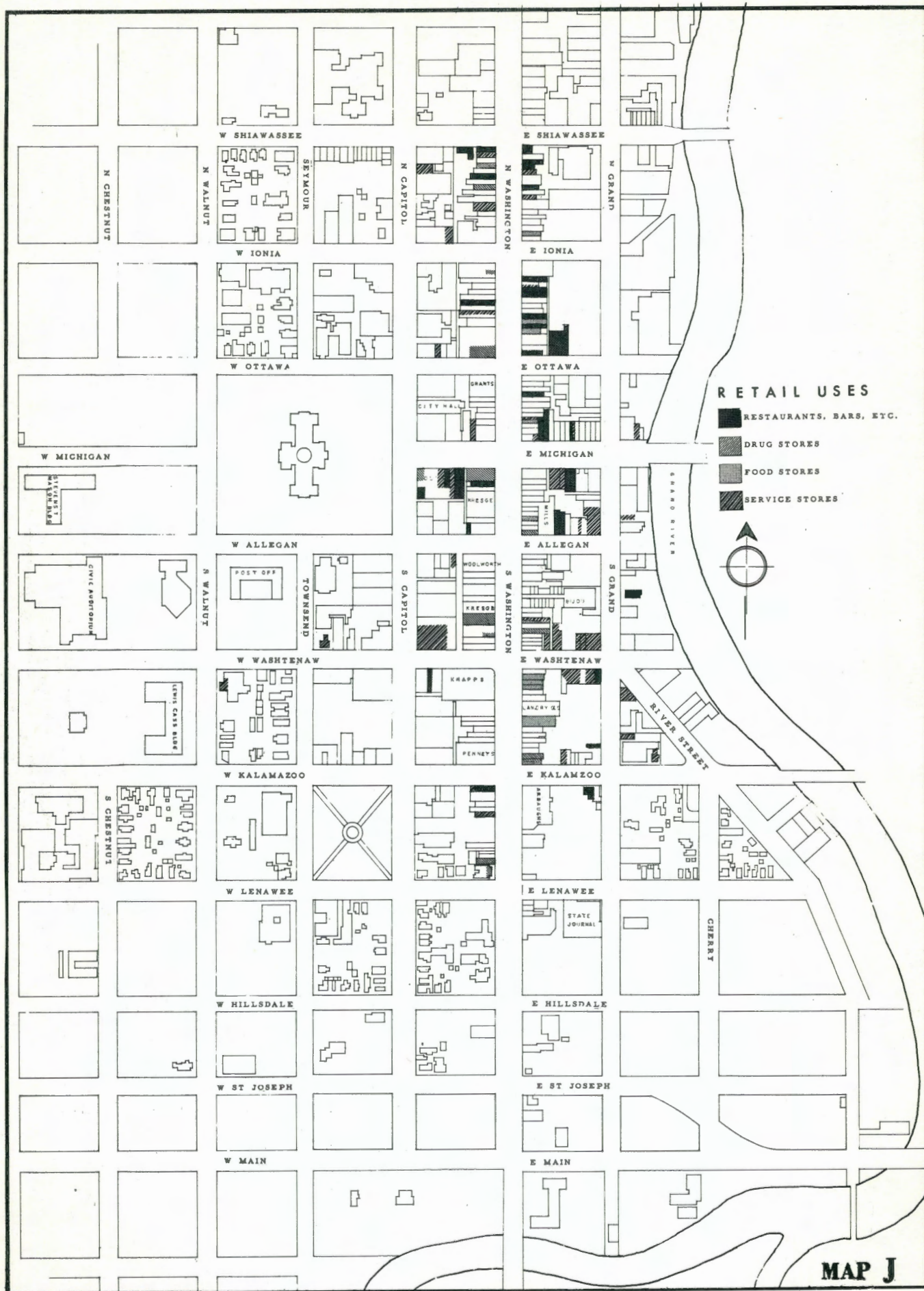
RETAIL USES: Restaurants, Drugs, Food, and Service, Map J

These stores are distributed throughout the urban area and pull customers for only short distances, hence their name, convenience goods. In the CBD these stores are dispersed throughout the retail and office cores for the convenience of the shoppers, visitors and workers.











## MISCELLANEOUS USES: Map K

Transient Residence (Hotels and Motels) plus (according to the Murphy Vance standards) four non-CBD uses, namely permanent residences, manufacturing, wholesale, institutional and vacancies are shown herein. There are very few however, of the latter four uses in the core areas which is a definite advantage. The residential areas shown often times are not necessarily residential on the street floor.

## COMPARISON OF LANSING CBD TO OTHERS

Lansing's CBD is now compared with nine other cities analyzed by Murphy and Vance in Table V. This table has two sets of percentages. In Column T are listed the percentages for all of the uses made by Murphy Vance. In Column R are listed selected uses for a comparison that omit those that we feel should not be located within a real shopping goods center. We have omitted parking, not because it is not essential to produce customers, but because it is an accessory or supporting use, unless eventually, multi-story ramps were constructed with street floor retail uses. Also Lansing has such an unusually large parking area (over double the Murphy-Vance average) that it tends to throw other comparisons out of balance.

"Automotive" is omitted because it is a drive-in facility, seldom visited on foot, and as such does little to create a concentration of pedestrian purchasing power, a major objective of a good retail center. All of the service and financial uses are retained in the R column because they help create downtown customers. This is one of downtown's monopolistic assets. In Column R we have also eliminated all of Murphy-Vance non-CBD uses as well as public and organizational



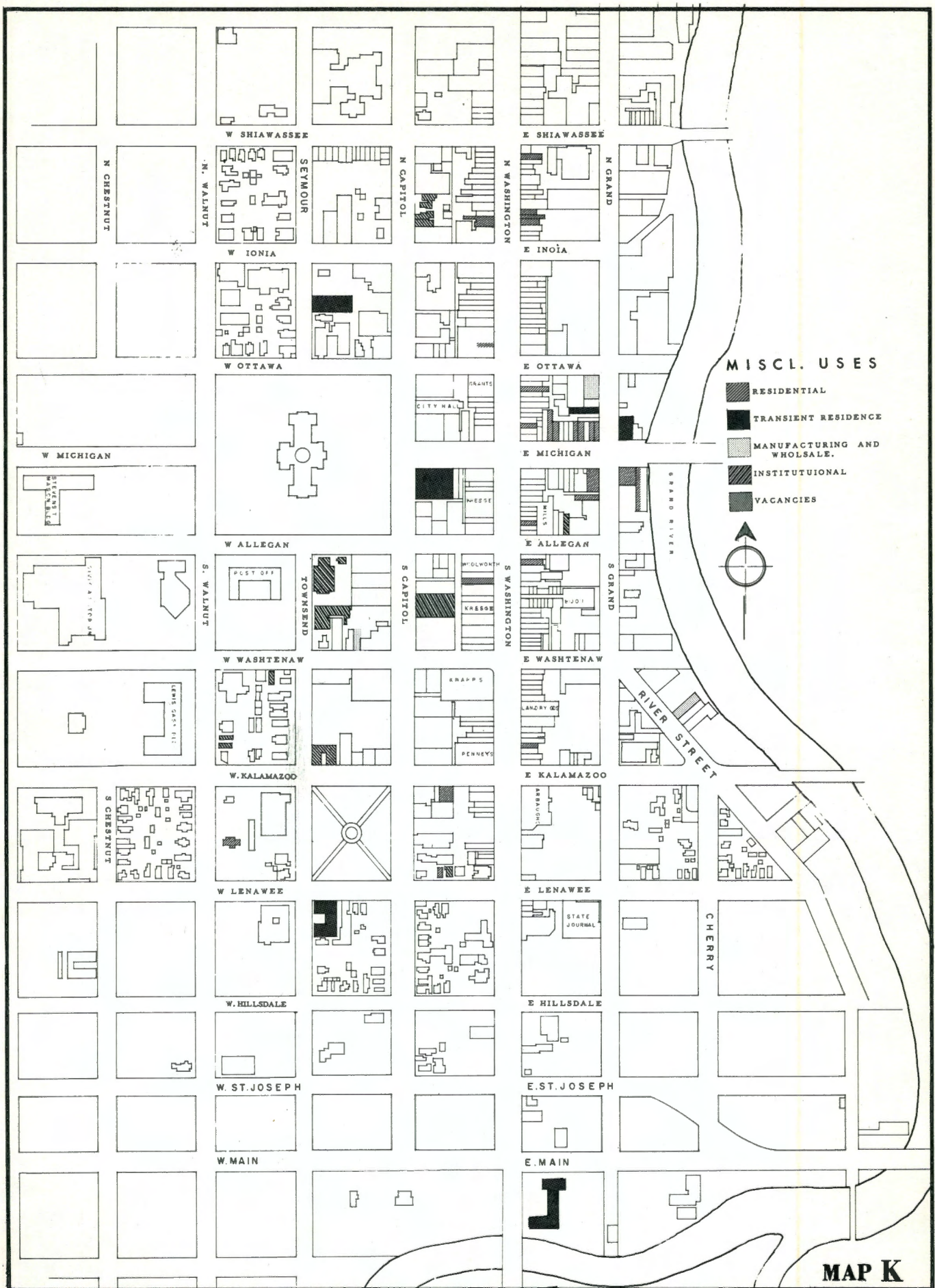




TABLE V

Results of Comparison of % of CBD Total Floor in Lansing with Murphy - Vance Cities.

	Percentage of CBD floor area in various uses									
	Phoenix		Sacrmnto		Grand Rapids		Average		Lansing	
	%T	%R	%T	%R	%T	%R	%T	%R	%T	%R
Food stores, restaurants, taverns	3.7	5.59	7.2	11.61	1.6	2.58	3.9	5.95	2.9	5.88
Clothing - all apparel	4.5	6.79	4.2	6.80	3.5	5.64	4.2	6.42	5.1	10.32
Household furniture, appliances, hdwr, rugs etc.	2.6	3.92	6.0	9.70	4.0	6.44	5.3	8.10	4.4	8.92
Automotive, auto sales, service station rentals etc.	7.1		6.1		2.6		3.9		5.1	
General Merchandise, department, variety*	10.4	15.67	3.7	5.98	8.7	14.00	8.8	13.42	5.6	11.35
Drugs	.9	1.36	.6	.97	.5	.85	.7	1.07	.6	1.22
Miscellaneous, sport, photo, toy, jewelry, office supplies	5.2	7.84	6.1	9.85	4.6	7.40	5.3	8.10	5.0	10.12
Total retail uses	34.4		33.9		25.5		32.1		28.7	
GAF	17.5	26.38	13.9	22.48	16.2	26.08	18.3	27.94	15.1	30.59
DSTM	22.7	34.22	20.0	32.33	20.8	33.48	23.6	36.04	20.0	40.71
Financial: Bank, personal loans, insurance and real estate brokers etc.	4.6	6.93	3.5	5.66	2.4	3.86	3.0	4.58	4.1	8.31
Service Trades - barber, beauty parlors, clothing pressing - dry cleaning	4.9	7.39	3.7	5.98	3.7	5.95	4.1	6.26	2.6	5.27
Headquarters Offices	2.0	3.01	2.0	3.24	7.1	11.40	5.0	7.64	3.7	7.50
General Offices	13.2	19.87	6.3	10.19	14.9	24.00	12.7	19.40	8.6	17.43
Total - Commercial office space	15.2		8.3		22.0		17.7		12.3	
Transportation, bus uses, air transport, trucking	1.1	1.66	1.0	1.61	.6	.97	.8	1.22	.1	.20
Parking, customer parking commercial parking	7.8		5.3		8.7		7.0		14.4	
Transient Residence - hotels etc.	13.3	20.00	17.5	28.30	10.5	16.90	11.7	17.88	6.6	13.39
Total service financial and office uses	46.9	58.9	39.3	55.00	47.9	63.10	44.3	56.9	40.1	52.10
R - 100%	66.4		61.8		62.1		65.5		49.3	
Residential - Permanent dwelling units	2.4		6.8		1.8		3.4		3.2	
Public and organizational - public building or ground space - organization and charitable organizations	10.1		13.6		14.1		11.6		19.0	
Industrial	.5		.6		2.4		1.5		.2	
Wholesale establishments (not separate offices)	1.5		1.1		2.1		1.8		.4	
Vacancy - vacant building store or lot, commercial storage	3.5		4.8		6.7		5.5		8.4	
Total Non-CBD Uses	18.0		26.9		27.1		23.8		31.2	

\*Note: Murphy - Vance included drug in their "Variety" group which also included general merchandise etc. We have kept them separately because of the GAF category and the fact that drugs are primarily convenience goods - not GAF puller type.



which in Lansing is 60% higher than the average, and accordingly, reduces the value of a more direct retail area comparison.

Also given are the total percentages in the GAF and DSTM categories to integrate this data with the market study.

Considering Column T, the Murphy-Vance direct comparison, Lansing's retail areas are a lesser proportion of the total CBD floor area than of Phoenix, Sacramento or the Murphy-Vance average. Note that in Column T, Grand Rapids, total retail area percentage is lower than Lansing. This is due to the fact that Grand Rapids has such a high percentage of office buildings, and that Lansing has such a high percentage of automotive and parking area. This is a good example of why we have selected the uses in Column R, namely, because it gives a more accurate comparison as far as the retail function is concerned.

Next, considering the R Column note that Lansing's GAF area percentage is 10% higher than average and higher than the other three cities listed. Further, the DSTM is 13% greater than the average. Accordingly, Lansing is not currently short on shopping goods store area in the CBD.

Downtown's Lansing's food store, restaurant and tavern area is about average percentage wise. Automotive area is high 5.1% vs. the average of 3.9%. Grand Rapids is half this but Sacramento and Phoenix are both greater. Referring to the R Column, the financial area in Lansing is 80% higher proportionately than the average and 116% greater than Grand Rapids.

Hotel space is short in Lansing. According to the R Column it amounts to 13.4% only 75% of the average. The other capital cities, Phoenix and Sacramento



hotel space amounted to 50% and 111% respectively. From other sources the hotels and motels show a state and county annual growth rate of 3.4% to 3.5%, but the City of Lansing growth is only 0.6% annually. Accordingly, there is an opportunity to promote hotel and motel developments.

Lansing has a high percentage of public - institutional space, over 60% greater than the average. This is beneficial because local governmental buildings attract people so that it plays somewhat the same role that office buildings do.

#### FUTURE OF CBD OFFICE BUILDING AREA

As in all cities there has been a decentralization of medical, professional offices and the like. There is an unusual number of dentists in "Lansing's" major downtown office buildings - 34% with another 29% in medical buildings, converted residents etc. directly adjacent to the CBD area and only 37% away from downtown. The MD's are located 17%, 55% and 27% respectively. (Source, Yellow Pages).

Lansing is fortunate in its demand for office space of attorneys, and national and state wide associations who find it advantageous to have direct contact with state and governmental officials and legislators.

Lansing has some 433,812 sq. ft. of commercial office space in a 16 block CBD area. Referring to Table V, Column T, Lansing's office space accounts for 12.3% of the total CBD area vs. 17.7% average and 22.0% for Grand Rapids, only Sacramento is lower with 8.3%.

The state and a few other institutional offices that are listed under public and organizational uses in Table V that might move some day are



currently leasing 184,336 sq. ft. in commercial office buildings or converted stores at present. It is doubtful if the state will have the funds for new structures to replace all of this space for some time and it probably will not be economical or politically expedient to move out of more than 66% of this leased area at any time. On this basis 122,000 sq. ft. might be leased sometime for commercial office use which with the new Stoddard Building at North Capital and West Allegan with 60,000 square feet, could total 615,812 sq. ft. of commercial office area. The percentage of total commercial office space to the total CBD area would then be increased from 12.3% to 17.3%. The public and organizational uses would be accordingly decreased to 15% (still greater than the 11.6% MV average). This 17.3% is still less than the 17.7% MV average and is only 80% of the Grand Rapids percentage.

The increase in office space demand by 1980 to be conservative we have assumed will be only 40% of the 612,812 sq. ft. or a new total area of some 864,000 sq. ft. Of course the labor force parking space will have to keep pace with this increase but that will be a part of the Planning Commission's CBD Master Plan for the frame area and considering the present land uses in this area is should not be a difficult problem.

All of the indications are that with the future growth for the metropolitan area and the improvements in access and parking in the CBD there will be continuing demand for downtown office space. There is a logical and natural location for such a development to the north of the retail core which can keep it separated as it should be from the retail core.



## FUTURE OF THE CBD RETAIL AREA

The losses of retail sales in the CBD, the need for better access and more convenient parking and the need to improve its appearance and add desirable amenities, marks the retail core as the major problem as far as modernization is concerned in the CBD.

We estimate the CBD in 1958 had 610,500 sq. ft. of GAF gross area including selling and service basements. With \$40.2 million in GAF sales it produced \$66 per sq. ft. Downtown has a high percentage of apparel and miscellaneous shopping goods stores which normally have a higher productivity than the general merchandise and home furnishings stores. Partially due to this, downtown should produce \$75 to \$80 per gross sq. ft. Frandor, without any basements and with approximately 253,000 sq. ft. of GAF area does an estimated \$15.0 million in sales which produce \$59 per sq. ft.

If the current ratio of GAF area to total retail area, 63.7%, remains in 1980, it would require an additional 500,000 sq. ft. of new retail area or a total retail area of 1,450,000 square feet in the CBD. This is based on GAF sales of \$69.3 million in 1980 utilizing an area of 925,000 sq. ft. at the rate of \$75 per sq. ft. With 225,000 sq. ft. of ground coverage, the new area would require a height index of 2.22 (including mezzanines and basements) which would be an average condition for this type of area.

When the expressway extension from U.S. 16 - east and west along Main and St. Joseph - is completed, the area north to Hillsdale eventually should be predominantly parking. This would logically terminate the expansion of the retail core at Hillsdale, which will increase the length of the main retail



street by 800 feet. Stores would be added from the south side of Arbaugh's present store to Hillsdale. The buildings would average mostly 165 feet deep on Washington (a half a block) with an additional 50,000 sq. ft. of ground area in extra depth for possible larger key stores, and including some frontages on east and west streets as at present on West Allegan. This would provide for an additional 225,000 sq. ft. of ground area for retail store expansion.

It is interesting to consider the increase in CBD sales as compared with the total metropolitan area sales to determine how much increase would go to the expansion of present or to new outlying centers. We have estimated 1958 GAF CBD sales at \$40.2 million which is 58.6% of the 68.5 million GAF as shown for the metro area. We project \$128 million for Lansing's metropolitan GAF sales for 1980 and \$69.3 million for the CBD which is 54% of this total the balance will go to the suburbs. Undoubtedly by 1980 it would be expedient for some of the key CBD stores to present their merchandise in branches in one or more regional centers in the suburbs.



## V-TRAFFIC

Adequate traffic accessibility is vitally needed for the continued growth and prosperity of the Central Business District. The downtown area is the focal point of business and civic activities, and it is the principal generator of the automobile traffic in the Lansing metropolitan area.

Adequate traffic facilities benefit all concerned. They make it easier for more people to reach shopping areas thereby increasing sales for business. This means a broader tax base and a healthier economy for the municipality.

The problems of cities like Lansing will be substantially increased rather than relieved upon completion of the modern expressways. Superimposition of expressways over the existing street pattern would change the traffic pattern drastically. More adequate parking facilities will be needed to accommodate the expressway traffic after it reaches the city; downtown streets and connecting routes will have to be upgraded and widened; more parking facilities will be needed; new traffic control systems will have to be established and new lighting systems will be necessary.

In this section a traffic plan for the Central Business District, which can be coordinated with the over-all downtown development plan, is presented. It is emphasized that improved traffic access and an adequate parking supply will not necessarily in themselves increase the business climate of the downtown area; however, studies in many cities have indicated that these are major contributing factors.



## TRAFFIC CHARACTERISTICS

The 1946 origin and destination study, conducted by the State Highway Department of Michigan for the Lansing Metropolitan Area, revealed that over 42,000 of the 210,000 vehicle trips, or 20 per cent of all vehicle movements, had origins or destinations in the Central Business District. The key findings of the origin and destination survey are summarized in Table VI.

Table VI  
SUMMARY OF VEHICLE TRIPS  
Lansing, Michigan Metropolitan Area\*

October, 1946

<u>TRIP MOVEMENTS</u>	<u>NUMBER OF TRIPS</u>	<u>PER CENT</u>
Trips to and from CBD (Zones 30 and 31)	42,218	20.2
Trips within CBD (Zones 30 and 31)	3,122	1.5
Trips thru Lansing Metropolitan Area	4,226	2.0
Other trips within, to, or from Lansing Metropolitan Area		
Total vehicle trips (except taxis and buses)	159,962	76.3
	209,528	100.0

\* Michigan State Highway Department, The Lansing-East Lansing  
Metropolitan Area Traffic Study - Tabulations, March, 1948

A traffic study of the CBD, was conducted during March and August, 1957 by the Lansing City Planning Commission. These studies indicated that approximately 85,000 vehicles crossed the cordon line in one direction on a typical weekday. The interview studies revealed that 40 per cent, or about 33,000 vehicles, passed through the CBD on an average day. This left approximately 52,000 vehicles, (one-way) which were destined for the CBD. These movements



have more than doubled during the past 13 years. It is readily apparent that there is a vast movement of vehicles daily to and from the center of the city. Some of the increase in vehicle movements can be attributed to a very substantial shift of travel modes from public transit to private automobiles.

Through Traffic - The traffic passing through the Lansing Metropolitan Area, without origin or destination within it, is a very small percentage of total traffic. In 1946, there were only 4,226 through vehicle trips, or about two per cent of all movements. Even though this percentage may have increased somewhat with improved inter-city highway facilities and the consequently greater amount of inter-city travel, it is doubtful that this type of through traffic today constitutes more than 15,000 to 17,000 vehicle trips per day. The importance and attractiveness of the metropolitan area is apparent.

Traffic Not Destined to Central Business District - Because of the existing major route and highway plan, a large percentage of traffic entering the CBD does not actually have destination within the area. In 1957, the Lansing City Planning Commission determined that even during peak hours approximately 40 per cent of all vehicles entering the CBD had destinations elsewhere and were merely passing through.

It is sound traffic planning to design a system of expressways and major arterials to minimize or eliminate, if possible, the traffic from the streets of the CBD that does not actually have origin or destination within or adjacent to the area. At the same time, adequate planning must be undertaken to improve vehicular access to the CBD with major radial routes to facilitate the movement of vehicles destined to the focal point of activity.



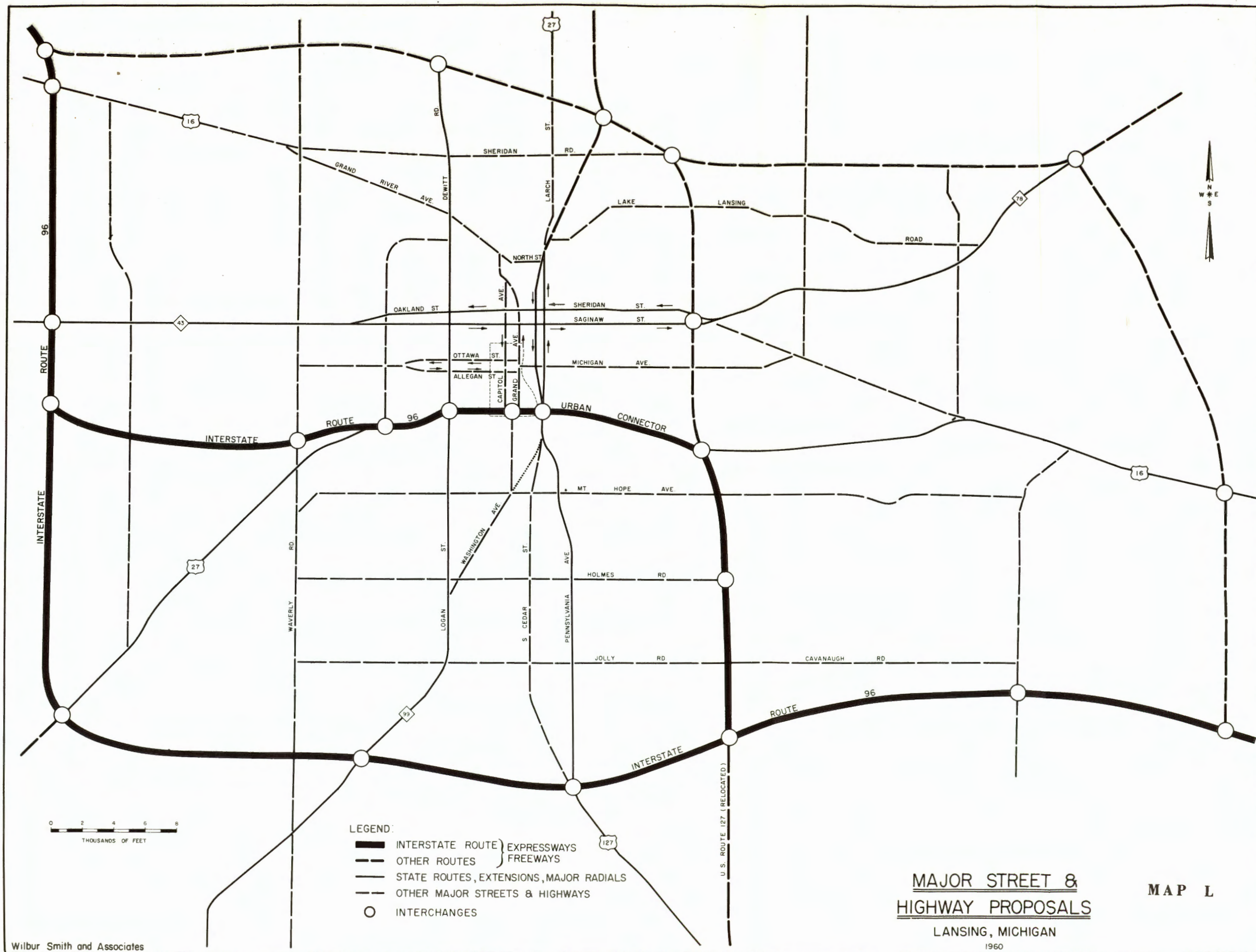
## MAJOR STREET AND HIGHWAY PLANS

During the past several years, city and state officials have developed a system of expressways and major streets in the Lansing area. The expressway and major street plan is shown in Map L. The planned improvements are discussed in the following sections relative to the importance of each route to the CBD.

Interstate Routes - Lansing is located on Interstate Route 96, which parallels existing U.S. Route 16, connecting Detroit and Grand Rapids. Interstate Route 96, in the Lansing Metropolitan Area, will divide into two routes. One segment will form a portion of an outer circumferential route around Lansing on the south and west sides, and will carry a major portion of the through traffic. It will intercept numerous state highways radiating from Lansing, some of which will be or have already been improved to expressway standards. The other segment of Interstate Route 96 will be an urban connector and will enter Lansing from the west, generally paralleling St. Joseph Street, and then will follow a depressed or elevated alignment between St. Joseph and Main Streets, and will traverse the CBD only six blocks south of Michigan Avenue. Beyond the CBD, it will rejoin the main line of Interstate Route 96.

Interstate Route 96, especially the urban connector, will provide excellent accessibility to the CBD from the metropolitan area and the surrounding region. A considerable amount of through traffic presently using the downtown streets, will be diverted to this expressway.







Traffic to and from various sections of the city can conveniently use the expressway system and would be directed by this route to within a few blocks of the major traffic generators in the CBD and the principal industrial districts of Lansing. A number of north-south and east-west streets will be relieved by the expressway routing.

Other Expressways - The expressway and major street plan would include a northward extension of Interstate Route 96. This route would traverse an area near the Lansing-East Lansing city limits and connect U.S. Route 27 and U.S. Route 127.

An east-west expressway is planned north of the city which would complete the outer loop of the expressways around Lansing. This route would connect Grand Rapids and Flint, Michigan, thereby by-passing Lansing on the north.

The expressway system as outlined will greatly improve traffic access to the CBD of Lansing. With the system of high capacity circumferentials, traffic will be intercepted prior to the more congested areas. The urban connector of the Interstate Route 96 will be a key to good access to the downtown area.

Trunk Line Urban Extensions - During the last several years, the city and state have been developing an excellent system of urban extensions to the rural trunk line highways which radiate from Lansing. These routes, will complement the system of expressways and together will form the framework of the Lansing street network.



The principal routes of this type are the St. Joseph and Main Street one-way pair, together with the Main Street high level bridge. The Cedar and Lark one-way pair, together with the South Cedar Street improvement and the North Cedar Street project provide an excellent through route on the east side of the Grand River. Other major streets will be Logan, and the Sheridan-Saginaw one-way pair. These four routes described above will include an area of about six square miles in size including the State Capitol area and the CBD of Lansing.

Other Major Streets - The major street plan indicates numerous other streets and highways which will connect the city's residential area with expressway and trunk line systems. Some of these routes are in need of improvement such as widening, others are discontinued at major physical barriers such as railroads and at rivers, and still others will be developed on entirely new alignments.

#### EXISTING TRAFFIC CIRCULATION PLAN

It is readily apparent that a number of physical barriers limit or restrict traffic flow within and adjacent to the CBD and the State Capitol area.

The Grand River restricts access to Lansing's downtown area on three sides. The North Grand River Avenue Bridge provides the only access from the north. On the east, access is somewhat improved as there are a number of bridges leading to the CBD. Saginaw Street has a new high capacity bridge structure; Shiawassee Street has a very narrow and out-dated bridge across the river; Michigan Avenue has a six-lane bridge, whereas the Kalamazoo Bridge has a curb-to-curb width of only 36 feet.



The Main Street structure which serves the St. Joseph-Main Street one-way trunk-line extension has a six-lane bridge across the Grand River. A number of important east-west streets do not continue east of the CBD due to the lack of bridge facilities.

The discontinuity in alignment found north of the CBD does not exist on the south. Washington Avenue, which is the main retail street, continues south across the Grand River. However, traffic using other north-south streets serving the CBD must either use the Logan Street Bridge or the Elm Street Bridge, which is located near the Oldsmobile plant.

The Capitol and other state buildings located west and south-west of the CBD form a barrier. Four blocks of Chestnut Street have been closed in the state buildings area. It is understood that one block of West Michigan Avenue, west of Walnut Street, which is also a relatively minor traffic carrier, will be closed in conjunction with the expansion of the state office building group.

It is difficult for traffic with origins and destinations in nearby areas to avoid passing through the central area of the city, since the streets which presently lead most directly to the few bridges traverse or are immediately adjacent to the CBD. As adequate facilities are developed, it will be possible for motorists to by-pass the downtown area. To some extent, this is now true in regard to the Cedar-Larch, trunk-line system east of the river. Logan Street also performs a similar function, but is handicapped because it is not continuous north of Willow Street. When the DeWitt Road-Alice Street-Logan Street improvement is completed within the next several years, a very important western by-pass of the CBD will be afforded.

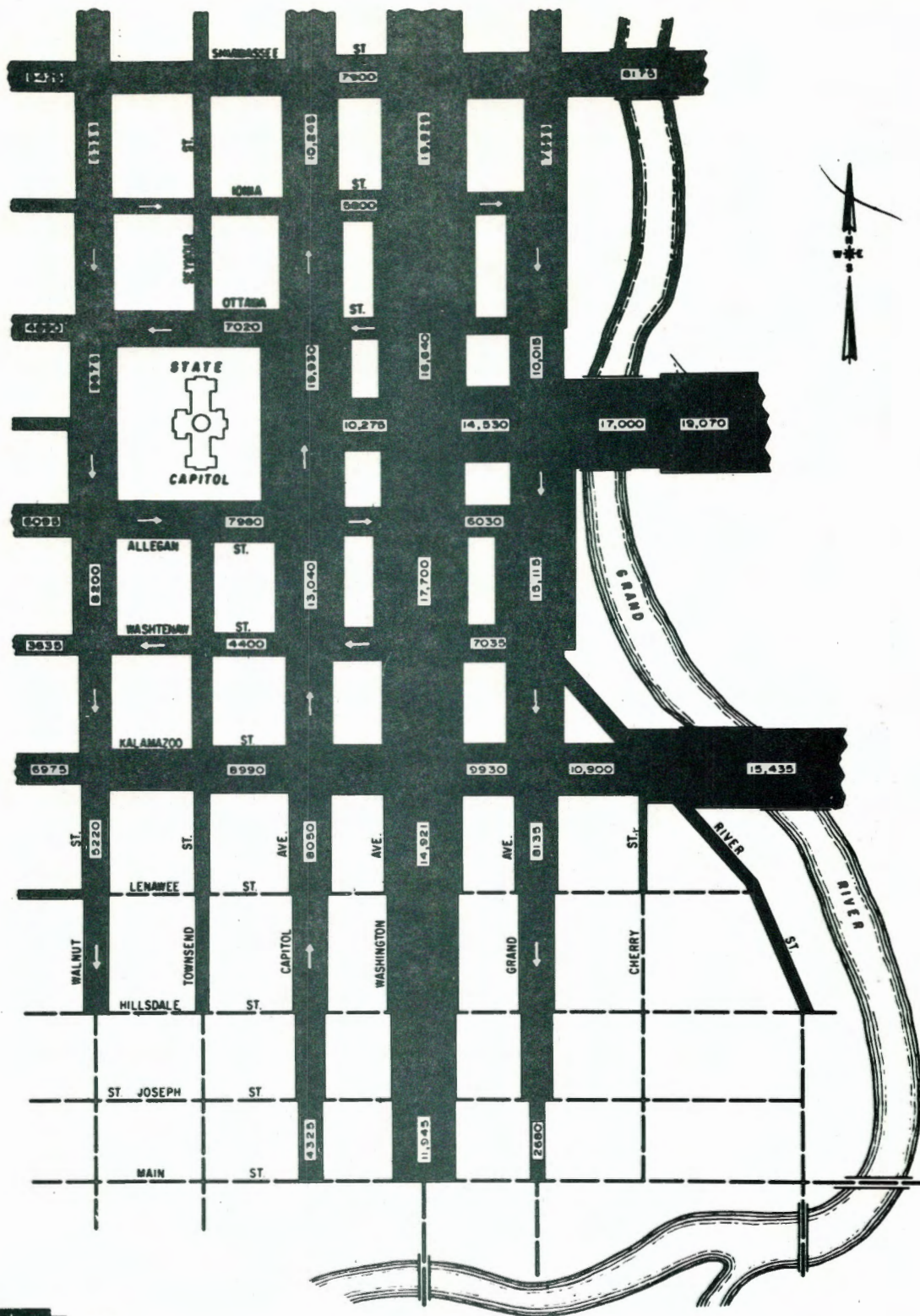


In an east-west direction the CBD is some what better served with regard to facilities capable of carrying the local traffic not originating or destined there. Saginaw Street effectively by-passes the CBD on the north and the St. Joseph-Main Street one-way pair performs this function on the south. However, Main Street is handicapped since it has a very low capacity east of South Cedar Street.

In Map M, the existing average daily traffic volumes in Lansing's Central Business District are depicted. It is noted that East Michigan Avenue accommodates the heaviest volume, by a small margin, of the streets serving the CBD. The next highest traffic carrier is East Kalamazoo Street. The major north-south streets, Grand, Washington, Capitol, Walnut and Pine are one-way streets with the exception of Washington Avenue, which is the principal retail street. Grand is one-way southbound and Capitol one-way northbound in the immediate downtown area. Walnut, southbound, and Pine Street, northbound, form an important secondary one-way couplet and undoubtedly divert some north-south through traffic from the commercial area.

Four east-west streets operate as one-way facilities in the CBD. Ottawa, westbound, Allegan, eastbound, on either side of the State Capitol, perform a very important function in carrying heavy volumes. Ionia, eastbound and Washtenaw, westbound, carry smaller traffic volumes and are located one block north and south of Ottawa and Allegan Streets, respectively. One block of River Street, a diagonal street, is one-way northwesterly from the Kalamazoo Street Bridge. Cherry Street, another collector street, located in the southwesterly fringe of the CBD is operated one-way northbound.





NOTE  
1958 ADT VOLUMES

**TRAFFIC VOLUMES**  
CENTRAL BUSINESS DISTRICT  
LANSING, MICHIGAN  
1959

**MAP M**

Wilbur Smith and Associates



Under the present system of one-way operations, there is a heavy build-up of volumes where Michigan Avenue terminates at Capitol Avenue. The traffic must transition via this northbound street to and from Ottawa and Allegan Streets, respectively. The flow diagram shown in Map M also shows a heavy increase in volume on Grand between Allegan and Washtenaw due to the addition of Allegan Street traffic turning south on Grand Avenue. A similar, but somewhat smaller increase occurs on Grand in the block between Ionia and Ottawa. The retail core area and the concentration of high turnover shopper parking lots are located south of East Michigan Avenue, thus creating the greatest volume concentration in the two or three blocks south of Michigan.

The present direction of one-way traffic on the north-south streets was installed after careful study. The plans permits operation of circulating blocks involving right turns only, in relation to the principal two-way artery, Washington Avenue. Furthermore, the two streets, Capitol and Grand, each of which has capacity for four moving traffic lanes, provide substantial relief for the main shopping street, Washington Avenue, which until mid-1958, had angle parking permitted on both sides throughout its entire length in the CBD. Traffic inbound to the CBD from East Michigan Avenue destined for the retail area turns left onto Grand Avenue southbound immediately west of the bridge.

The present directional one-way pattern creates a heavy transition movement on Capitol Avenue at the State Capitol grounds, thereby sharply increasing traffic volumes and turning movements. Northbound traffic from the State Capitol and office buildings area, including the Civic Center of Lansing, is forced to use Allegan Street to Capitol Avenue this produces heavy volumes



during peak periods which apparently are unnecessarily drawn into the core area of the business district. The transition movements between South Washington and Capitol and Grand respectively are unnatural since a crossing conflict between the north and southbound traffic is created.

#### Transit Operation in the Central Business District

Like many other cities, transit usage has steadily decreased in Lansing since World War II. In 1943, there were about 13,000,000 revenue passengers. By 1957, usage had declined to about 3,000,000. The change in mode of travel has increased automobile volumes and created additional parking demand.

The CBD is the focal point of transit operations. Most of the lines meet or intersect at the intersection of Michigan and Washington Avenues. Surprisingly, only a few of the buses utilize Washington Avenue, the key retail street for more than two blocks. Many transitioning routes, often circuitous, utilize Allegan, Capitol, Michigan, Grand and Ottawa Streets.

It is apparent that a dynamic transit program will have to be initiated to halt the present decline in usage and to produce a substantial increase. The total elimination of transit service will have several detrimental effects on the Central Business District. Transit service is one of the competitive advantages of the CBD. Many additional parking spaces would have to be developed and additional traffic capacity would have to be designed. In the following sections, the plan is presented for the CBD which will feature transit service.



### Proposed Circulation Plan

In the following sections, changes in the traffic circulation plan are presented. The changes will be necessary to achieve a workable CBD plan including the proposed pedestrian mall. Also, the downtown pattern must be integrated with major street and highway improvements.

### Modified Pedestrian Mall

The plan for the renewal and revitalization of the Lansing Central Business District includes a modified pedestrian mall development on Washington Avenue. The proposal involves the closing of several blocks of Washington Avenue to all vehicular traffic with the exception of transit and emergency vehicles. Therefore, the roadway could be drastically reduced in curb-to-curb width. This would permit the establishment of large areas reserved for pedestrians within the 115 foot right-of-way lines of Washington Avenue. North-south traffic would be transferred to Grand and Capitol Avenues, but the streets crossing Washington Avenue would remain open to traffic.

With the closing of Washington Avenue to vehicular traffic an effective segregation of travel modes would be accomplished. The transit vehicles would be separated from the passenger vehicles in the downtown area, thereby increasing the potential lane capacity on the streets. Pedestrians would be afforded more attractive facilities and traffic-pedestrian conflicts would be greatly reduced. The parkers would utilize facilities along Grand and Capitol Avenues.

It is realized that the development of the mall will not be the entire solution for the downtown area. Like traffic and parking improvements, the mall must be integrated with other renewal projects; however, the mall plan has received



favorable reaction from city planners, traffic engineers, merchants, architects, civic officials and others in many communities. The mall can be attractively designed and landscaped, including bus shelters and other features which would emphasize transit in the downtown area.

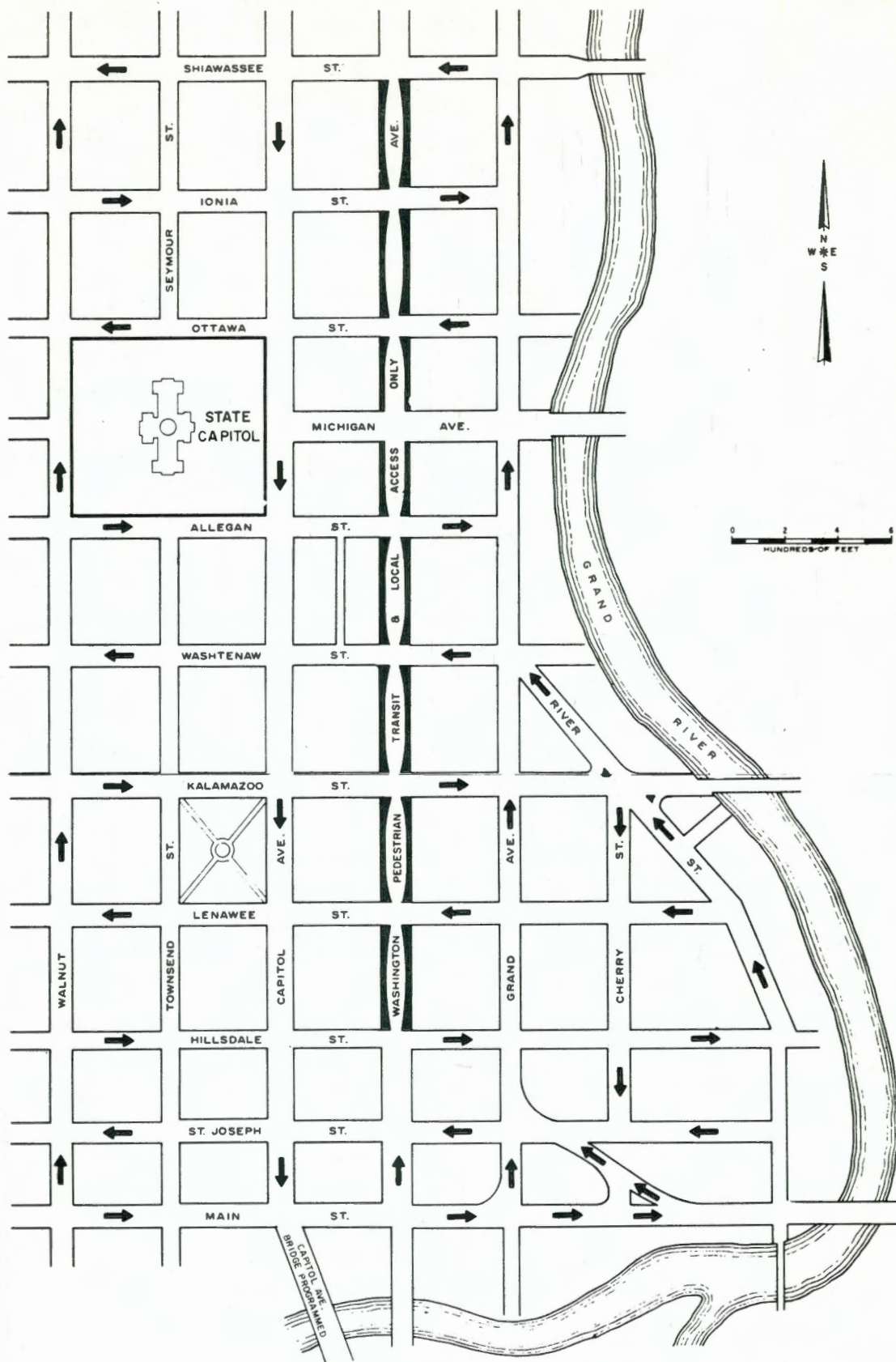
#### Immediate Plan

The immediate program for the closing of Washington Avenue would be from Ottawa Street on the north to Lenawee Street on the south.

The establishment of Washington Avenue for transit usage only would funnel all of the lines to the most important area of the Central Business District. Therefore, walking distances would be greatly reduced and a more logical and orderly interchange of transit passengers could be developed. It is realized that other operational features of the transit system would have to be studied, including transit lanes on key streets, rate schedules, new equipment and elimination of unprofitable routes. In effect, the mall plan would feature the transit system and should be a cornerstone for the over-all rejuvenation of the system.

With the closing of Washington Avenue, it will become logical to reverse the direction of flow on Grand and Capitol, as shown on Map N, since the circulating blocks of Washington would no longer exist. It is planned to maintain the direction of flow on the east-west one-way streets and thus achieve the transition of Michigan to and from Ottawa and Allegan, respectively on northbound Grand Avenue instead of the present northbound Capitol Avenue. The remaining east-west streets between Saginaw on the north and St. Joseph on the south would be included in a complete network of the east-west one-way streets.





# PROPOSED CIRCULATION PLAN

CENTRAL BUSINESS DISTRICT  
LANSING, MICHIGAN



The reversal of Grand and Capitol Avenues would facilitate the transition movement from south Washington near Main. With the construction of a South Capitol Avenue Bridge, which has been programmed by the city, Washington Avenue might readily be operated one-way as far north as Lenawee even though it would parallel Grand Avenue, which would also be northbound in these three blocks.

North of the CBD a transition from Grand to Washington utilizing Lapeer Street appears logical. With the reversal of Grand and Capitol, Walnut and Pine should also be reversed facilitating movements in the State Capitol and Civic Center areas. Northbound volumes from parking lots in this area would proceed directly north on Walnut without being forced into congested portions of the downtown area. The heavy movement on East Kalamazoo over the bridge would be facilitated by being separated into two one-way streams within the CBD. The westbound volumes would enter via River Street and then continue west on Washtenaw Street, or turn northerly into Grand Avenue.

Interesting data were obtained in June, 1958, while Washington Avenue was actually closed for two days between Ionia and Lenawee, during a downtown sales promotion. The increased volumes obtained for each block on Capitol and Grand Avenues during this operation are valuable evidence that the two streets can be made to accommodate the traffic loads of these three streets.

With the general increase in traffic volumes it may become necessary to prohibit curb parking on Grand Avenue in this area. With adequate traffic control devices, it should be possible to provide capacity for 600 or more



vehicles per hour, per lane. With four lanes, it would be possible to transport about 2,000 vehicles in the peak hour. When Washington Avenue was closed, during the special downtown sales campaign, presumably high volume conditions prevailed which were will in excess of normal peak-hour traffic. The volume of 2,000 vehicles per hour was exceeded only in one block of Capitol Avenue.



## VI -PARKING

There are many factors which must be considered in the development of a renewal and rejuvenation plan for the Central Business District of Lansing. Adequate parking must be provided to meet the present deficiencies and to provide sufficient capacity for the anticipated increases in sales and general business activity.

The proposed CBD plan will feature improved transit and automobile access to the area. As previously mentioned transit vehicles would utilize Washington Avenue and deliver passengers in front of the stores. The parking areas should be conveniently located to reduce walking distances and avoid vehicle-pedestrian conflicts. In the following sections, the parking demands and needs are presented and a general outline for implementing a parking plan is discussed.

### Parking Space Inventory - Serving The Core Area

For the parking studies, the core area was considered as the seven blocks on each side of Washington Avenue, extending from Shiawassee Street on the north to Lenawee Street on the south. A larger area was included in the inventory to ascertain the parking capacity which presently serves this 14 block core area. The inventory area is bounded generally by Shiawassee Street on the north, the Grand River, on the east, Lenawee Street on the south, and Townsend and Seymour Streets on the west. The inventory included curb and off-street spaces. For the off-street areas, private facilities which serve parking generators in the fringe blocks were not included, since these spaces are not available to the general public, therefore they would not serve demands of the core area.



As given in Table VII, there are 2,104 parking spaces located within the core area. In the adjacent blocks, there are 1,858 spaces which are available to the general public, and thereby serve the core area. Therefore, there is a present capacity of 3,962 parking spaces serving the core area. A total of 873 spaces are located at the curbs and about 2,682 spaces in commercial lots and garages, including the lots which have been developed by the city. There are only 407 spaces contained in private lots. These facilities have been developed primarily by individual establishments to serve their visitors and/or customers.

The 1959 off-street parking facilities are shown in Map O. The major concentration of off-street parking facilities is north of Ottawa Street and south of Allegan Street. There are only 689 spaces located within the seven blocks on the west side of Washington Avenue as compared to 1,415 spaces in the seven blocks on the east side of Washington Avenue within the core area. When the adjacent blocks are included, it is noted that there are 1,986 spaces on the west side of Washington Avenue as compared to 1,976 on the east side. It is apparent that the blocks on the west side are quite dependent for their parking supply in the adjacent blocks between Townsend and Seymour Streets and Capitol Avenue.

As given in Table VIII, the parking rates of the commercial facilities are quite variable. For one hour of parking, the fee ranges from 5 cents to 35 cents. The most common rate approximates ten cents per hour. The range for two hours of parking is from 10 to 45 cents with the average rate approximating 20 cents. Eight of the 20 facilities having a three-hour rate, charge 30 cents with the range being from 15 cents to 55 cents. Some facilities encourage all-day



Table VII  
PARKING SPACE INVENTORY  
(Serving Core Area Blocks)

BLOCK No. (1)	IN BLOCK				ADJACENT BLOCK				TOTAL			
West Side of Washington	Curb	Comm.	Private	Total	Curb	Comm.	Private	Total	Curb	Comm.	Private	Total
83	44	-	53	97	32	265	-	297	76	265	53	394
96	48	-	12	60	38	165	-	203	86	165	12	263
101	39	-	54	93	12	-	-	12	51	-	54	105
110	30	65	-	95	11	-	-	11	41	65	-	106
115	45	28	23	96	35	315	-	350	80	343	23	446
128	46	-	-	46	31	336	-	367	77	336	-	413
136	28	154	20	202	57	-	-	57	85	154	20	259
Sub-Total	280	247	162	689	216	1,081	-	1,297	496	1,328	162	1,986
East Side of Washington												
67	35	125	56	216	15	-	10	25	50	125	66	241
97	36	284	-	320	14	-	62	76	50	284	62	396
100	37	-	-	37	4	105	-	109	41	105	-	146
111	38	-	15	53	4	22	18	44	42	22	33	97
114	40	170	-	210	13	80	5	98	53	250	5	308
129	38	203	42	283	37	-	-	37	75	203	42	320
135	31	265	-	296	35	100	37	172	66	365	37	468
Sub-total	255	1,047	113	1,415	122	307	132	561	377	1,354	245	1,976
GRAND TOTAL	535	1,294	275	2,104	338	1,388	132	1,858	873	2,682	407	3,962

(1) Block designations shown in Map P.



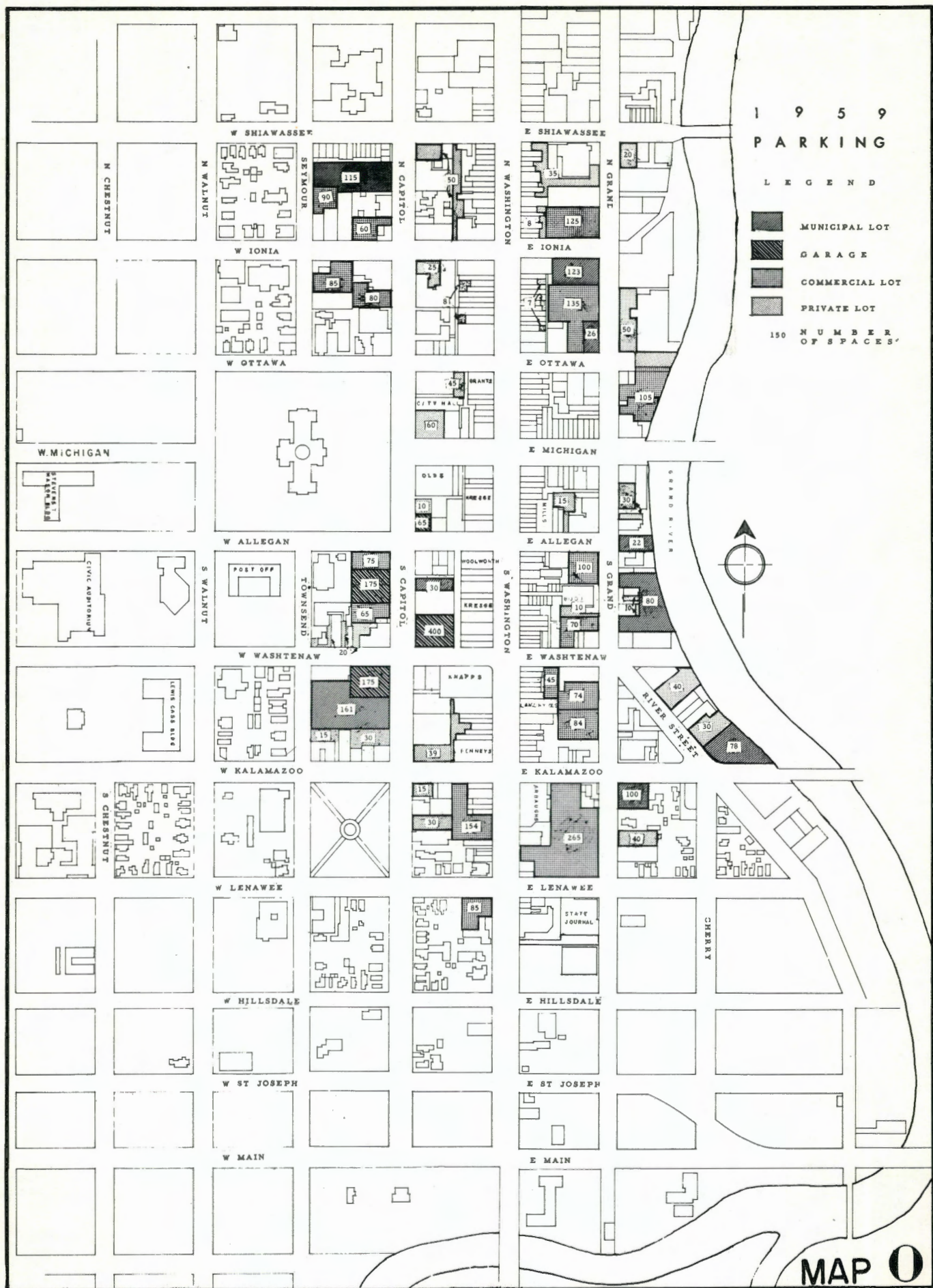




Table VIII

## RATE SCHEDULES OF COMMERCIAL FACILITIES

<u>CHARGE</u> (Cents)	<u>NUMBER OF FACILITIES</u>			
	<u>One Hour</u>	<u>Two Hours</u>	<u>Three Hours</u>	<u>All-day</u>
5	1	-	-	-
10	9	1	-	-
15	-	-	1	-
20	3	9	-	-
25	4	3	1	1
30	-	4	8	1
35	5	-	2	3
40	-	-	3	4
45	-	5	-	-
50	-	-	2	7
55	-	-	3	-
60	-	-	-	1
65	-	-	-	-
70	-	-	-	-
75	-	-	-	2
80	-	-	-	3
Over 80	-	-	-	2
TOTAL	22	22	20	24



parking while others with high maximum rate accommodate mostly short-time shopper parking. The all-day rate in the Lansing CBD ranges from 25 cents to \$1.15 in the core area. About one-third of the facilities charge 50 cents and two-thirds charge 50 cents or less for all-day parking.

The parking rates found in Lansing equal, or are slightly less than those found in other cities of comparable size. The rates for short-time parking have been reduced during the last several years, which has improved parking turnover and over-all usage of the commercial facilities. In 1958, a "Park and Shop" plan was inaugurated by the retail merchants in the downtown area. Under this plan the merchants pay all, or a portion of the parker's fee. This has been quite successful and should be encouraged to attract additional shoppers.

#### Parking Demands and Needs - 1960

The parking demands have been ascertained for each of the 14 core area blocks. In the report, "A Parking Program for Lansing, Michigan" prepared by Wilbur Smith and Associates in 1956, it was determined that the 14 blocks in the core area created an average peak parking demand for about 2,850 spaces. Conservatively assuming a 15 per cent increase in the parking demand between 1956 and 1960, the estimated over-all demand would be about 3,300. It is realized that the parking demand represents average weekday conditions and does not allow for peak shopping seasons such as Christmas and Easter.

The demands have been calculated for 1960, assuming a renewal and rejuvenation of the CBD. This would include improved traffic access, the provision of the mall which would separate pedestrian and vehicular traffic, a concerted



advertising campaign, continued and increased validation of parking, and physical improvements of the stores and offices. Allowance has also been made for seasonal capacity requirements.

In the calculations, parking space requirements have been assigned based on the floor areas in several categories for each block. As presented in Table IX, there will be about 2,500,000 square feet of floor area in the 14 blocks by 1960. This area has been divided into several categories, including retail, hotel, services, financial, general headquarters office, and public and organization. Automotive and several minor categories have not been included in the analyses. Similarly some space has been deleted from the public and organizational category in the block containing the Masonic Temple. The new 60,000 square feet of area of the building erected at the intersection of Allegan Street and Capitol Avenue has been included.

Retail area will total 959,000 square feet or 38 per cent of the total. The second highest category will be public and organizational, which includes a substantial amount of the office space utilized by State Departments. General and headquarters offices use will provide 339,000 square feet.

Based on the previous assumption of increased business and retail activity, factors have been applied to produce an over-all parking demand. For the retail areas a demand ranging from between two and three spaces per 1,000 square feet has been utilized. The higher value was used for department stores, which are the primary destination of many parkers, whereas many other retail areas are secondary destinations in many instances. For hotels, a value of 0.7 spaces per



Table IX

## FLOOR AREAS OF CORE BLOCKS

TYPE (1,000's Square Feet)

<u>BLOCK NO. (1)</u>	<u>Retail</u>	<u>Hotel</u>	<u>Services</u>	<u>Financial</u>	<u>Gen. &amp; Hq. Office</u>	<u>Public &amp; Organizational</u>	<u>TOTAL</u>
West Side of Washington							
83	73	-	22	-	-	22	117
96	83	-	2	2	29	178	294
101	63	-	29	18	32	236	378
110	63	220	0	33	181	59	556
115	63	-	3	9	12	160	247
128	152	-	0	0	1	6	159
136	22	-	6	2	4	1	35
Sub-Total	519	220	62	64	259	662	1,786
East Side of Washington							
67	47	-	41	1	0	31	120
97	56	-	1	0	9	3	69
100	52	-	18	8	12	2	92
111	59	-	8	4	30	20	121
114	53	-	16	20	20	34	143
129	76	-	3	4	9	1	93
135	97	-	2	8	0	0	107
Sub-Total	440	0	89	45	80	91	745
GRAND TOTAL	959	220	151	109	339	753	2,531

(1) Block designations shown in Map P.



1,000 square feet was used. For services, a demand of two spaces per 1,000 square feet was applied. The financial area is anticipated to develop a parking demand of 2.5 spaces per 1,000 square feet and, for the general and headquarters office space and public and organizational office space, which involves many employees (all-day parkers) and somewhat less visitation than the other categories, an index of 1.5 spaces per 1,000 square feet was utilized. With the above factors applied there would be a 1960 total parking demand of 4,830 spaces, or an increase of 1,530 spaces over the projected demands based on the previous parking report.

In Map P and Table X, the estimated 1960 parking supply and demand are presented for each of the core area blocks. In calculating the supply, the spaces in the core blocks and the adjacent blocks have been combined. Also, the curb spaces which will be deleted with the implementation of the pedestrian mall have been taken into consideration. There will be a 1960 effective supply of about 3,710 spaces to serve the 4,830 space demand. The seven blocks on the west side of Washington Avenue will have an over-all deficiency of about 1,2000 spaces and there will be a surplus of about 80 spaces on the east side. It is evident that a concerted parking program must be developed which would produce approximately a 25 per cent increase in the supply. The proposed 400 space garage, under construction at Capitol Avenue and Washtenaw Street has not been included in the supply. This would therefore, reduce the deficiency on the west side of Washington Avenue to about 800 spaces.



Table X

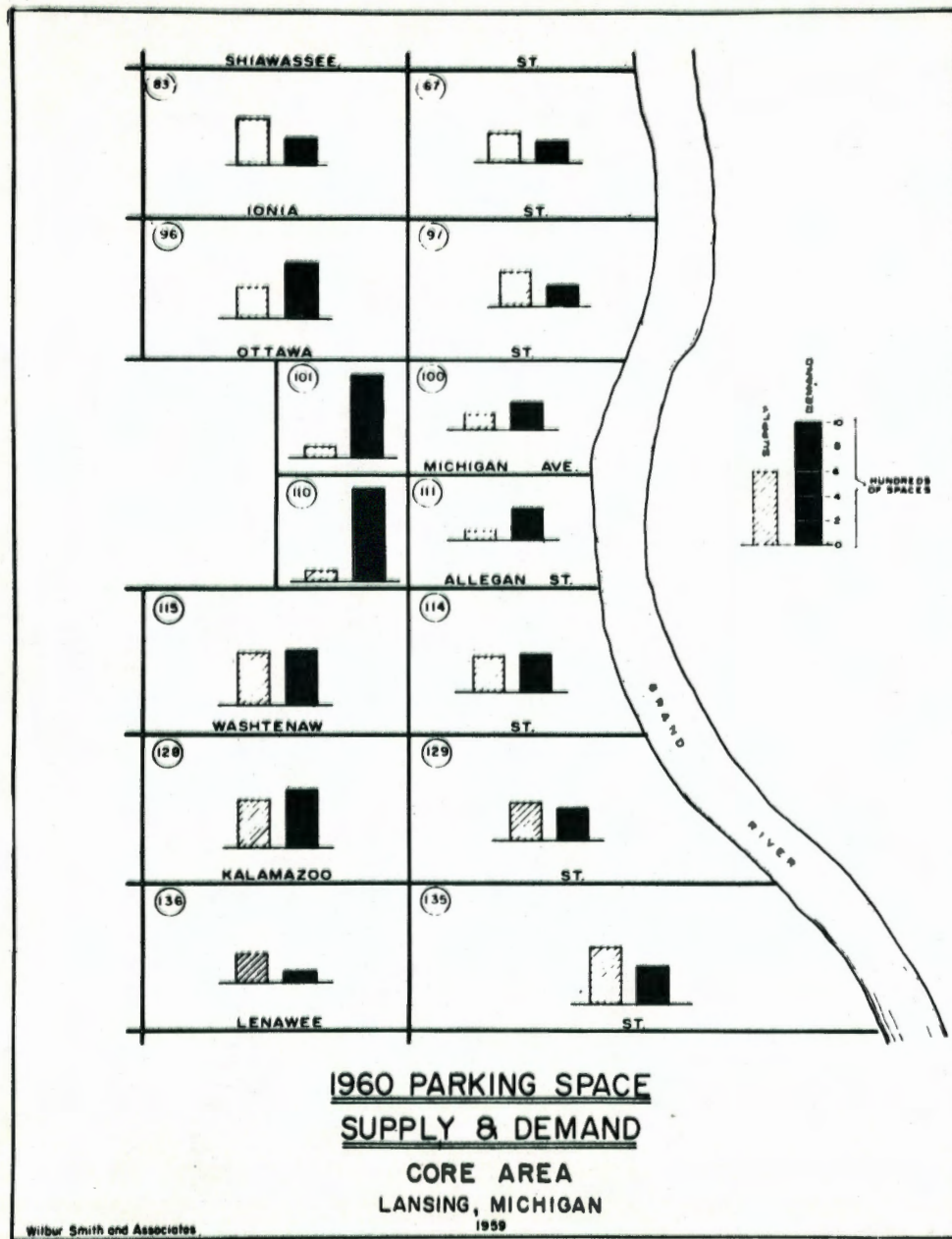
## PARKING SUPPLY AND DEMAND (1)

<u>BLOCK NO.(2)</u>	<u>1960</u>				<u>1980</u>			
	<u>Demand</u>	<u>Supply</u>	<u>Surplus</u>	<u>Deficiency</u>	<u>Demand</u>	<u>Supply</u>	<u>Surplus</u>	<u>Deficiency</u>
83	220	394	174	-	250	383	133	-
96	450	252	-	198	580	228	-	352
101	670	91	-	579	690	54	-	636
110	760	92	-	668	780	65	-	715
115	450	431	-	19	450	397	-	53
128	470	399	-	71	500	384	-	116
136	90	249	159	-	300	67	-	233
Sub-Total	3,110	1,908	333	1,535	3,550	1,578	133	2,105
67	180	241	61	-	160	227	67	-
97	170	289	119	-	300	272	-	28
100	220	129	-	91	490	115	-	375
111	260	81	-	179	280	55	-	225
114	310	294	-	16	340	280	-	60
129	270	306	36	-	290	293	3	-
135	310	462	152	-	370	403	33	-
Sub-Total	1,720	1,802	368	286	2,230	1,645	103	688
GRAND TOTAL	4,830	3,710	701	1,821	5,780	3,223	236	2,793

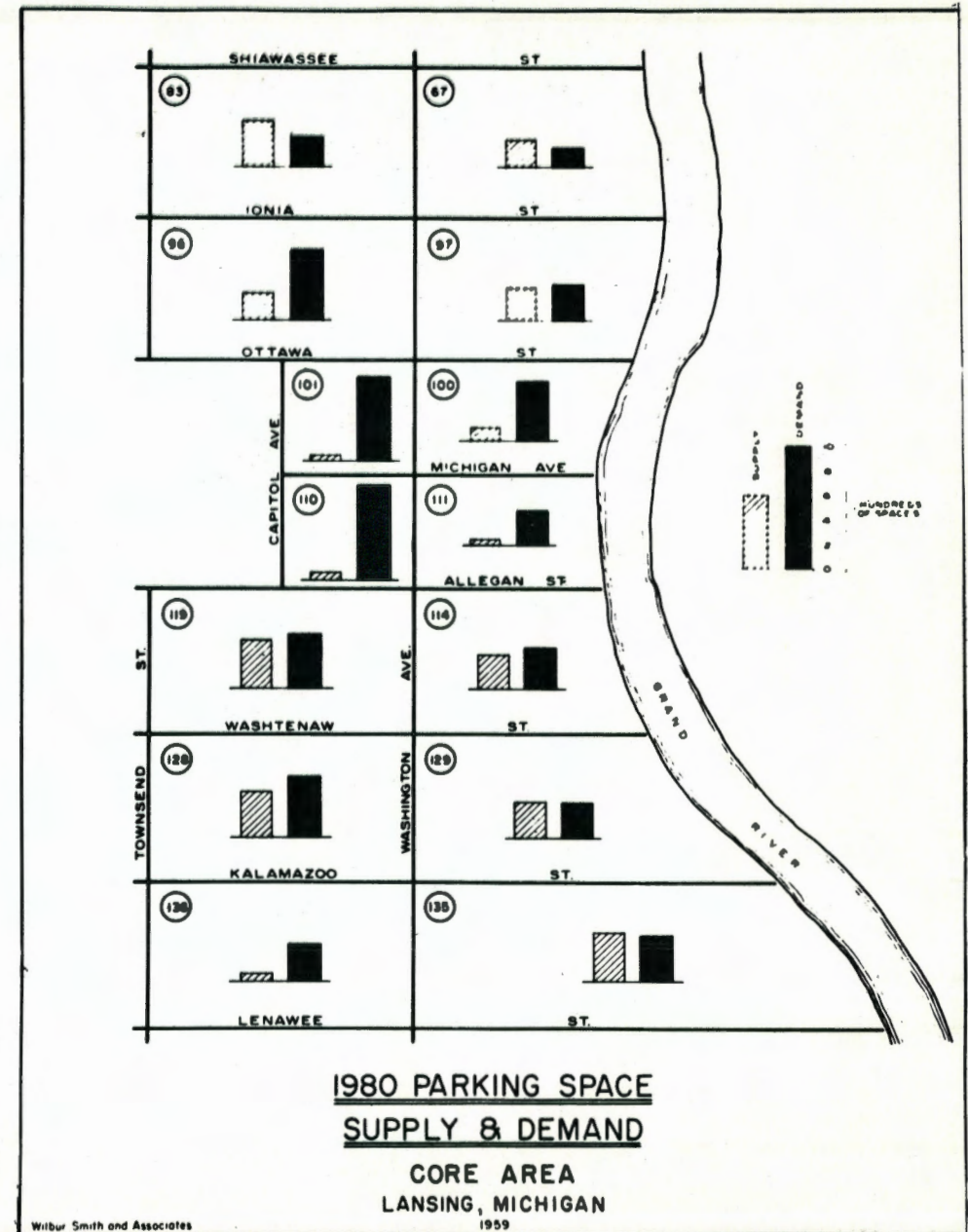
(1) Assumes development of proposed pedestrian mall.

(2) Block designations shown in Map P.





MAP P



MAP Q



### Parking Demands and Needs - 1980

The parking demands have also been projected to 1980 based on anticipated growth in floor area in the Central Business District. Based on projected land use, it is anticipated that the greatest increase in office space will occur north of Michigan Avenue. The primary retail expansion in the core area can be expected to occur in the two-block area bounded by Kalamazoo Street on the north, Grand Avenue on the east, Lenawee Street on the south and Capitol Avenue on the west. The same ratio of parking space demand on a square foot basis has been retained for 1980 for each category. It has been assumed that sufficient parking capacity will be constructed as an integral part of the new developments. It is estimated that the parking demands will increase in the core area from 4,830 spaces in 1960 to about 5,780 spaces by 1980. It is also anticipated, that there will be a loss of approximately 500 parking spaces between 1960 and 1980. These losses will occur at the curb, where additional traffic lanes will be required to facilitate the movement of traffic. Several off-street facilities can also be expected to be deleted to provide additional area for new buildings. Based on these expectations, there will be an over-all supply of about 3,223 spaces as compared to a demand of 5,780 spaces by 1980, or a deficiency of almost 2,600. The additional spaces which will be provided by the proposed new Michigan National Bank garage, have not been included in the calculations. When this facility is completed the over-all deficit will be reduced to approximately 2,200 spaces.



As shown in Map Q, and presented in Table X, there will be a deficiency of approximately 2,000 spaces on the west side of Washington Avenue and about 600 spaces on the east side by 1980.

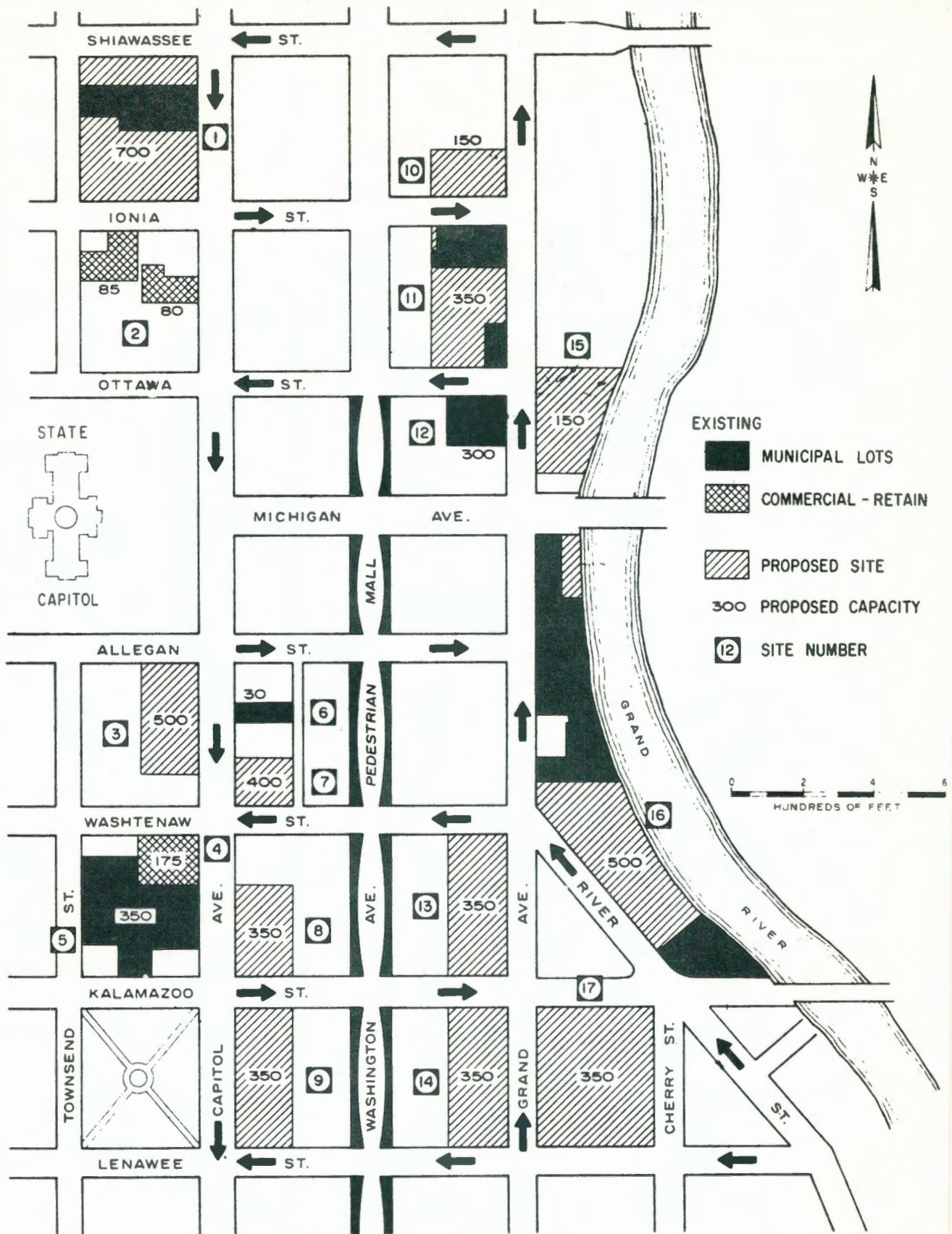
It is apparent therefore, that a vigorous program of parking facilities will have to be initiated to achieve the desired capacity.

### Parking Plan

The traffic plan would involve the closing of Washington Avenue and the development of a modified pedestrian mall. The main emphasis would be placed on developing the Washington Avenue frontage. The plan involving the development of adequate parking areas on both sides of Capitol and Grand Avenues, would be ideal since the new areas would be within easy walking distance to any major generators. The rear portions of the blocks fronting along Washington Avenue should be developed for short-time parking which would produce walking distances of less than 200 feet. Actually, rear access entrances could be developed to many of the buildings directly from various levels of the parking facilities. This would substantially reduce the pedestrian-vehicular conflicts. Along Grand Avenue, this type of rear entrance development has taken place in five of the seven blocks; however, on Capitol Avenue, all of the parking developments have occurred on the west side. The new garage at Washtenaw Street and Capitol Avenues will be located on the east side.

The proposed parking plan is depicted in Map R. Key features of the various sites are as follows:





## PROPOSED PARKING PLAN

CENTRAL BUSINESS DISTRICT

LANSING, MICHIGAN

1960

MAP R



- (1) This site would involve the development of a 700-space two-level structure in the complete block bounded by Shiawassee Street, Capitol Avenue, Ionia Street and Seymour Street. The site includes 115-space surface lot which has been developed by the city. Two other existing surface facilities are included. The deck would accommodate primarily all-day parkers.
- (2) The two existing surface lots with a capacity of 165 spaces should be retained in the block bounded by Ionia Street, Capitol Avenue, Ottawa Street and Seymour Street.
- (3) A 500-space garage is recommended for development on the west side of Capitol Avenue between Allegan and Washtenaw Streets. This would replace a surface lot. It would serve both short-time and long-time parking demands for the Capitol, Hotel, and office building areas.
- (4) The 175-space garage at Washtenaw Street and Capitol Avenue should be retained or equivalent spaces provided.
- (5) At least 350 spaces should be developed in the block bounded by Washtenaw Street, Capitol Avenue, Kalamazoo Street, and Townsend Street. The city recently procured additional property to enlarge the present lot to about 200 spaces.
- (6) The 30-space municipal lot located on the east side of Capitol Avenue between Allegan and Washtenaw Streets should be retained. It has



been temporarily used for storage of materials during the construction of the adjacent office building. And as a drive-in bank during the construction of the bank's garage at Washtenaw and Capitol.

- (7) A bank is developing a 400 car garage in conjunction with its operations at Washtenaw Street and Capitol Avenue. This facility will be ideally located to serve the short-time parking demands of the area. The bank should be encouraged to keep this garage open during retail hours and not only banking hours.
- (8) A 350 space garage is recommended on the east side of Capitol Avenue between Washtenaw and Kalamazoo Streets. It would primarily serve the retail frontage along Washington Avenue and should accommodate short-time shopper parking.
- (9) A 350 space facility should be developed in the entire half-block on the east side of Capitol Avenue between Kalamazoo Street and Lenawee Street. The facility should initially be developed as a surface lot and later expanded to a multi-deck facility dependent upon the type of land use along Washington Avenue.
- (10) The 150 space surface facility should be retained at the intersection of Ionia Street and Grand Avenue. It will primarily serve all-day employee parking.
- (11) The site between Ionia and Ottawa Streets on the west side of Grand Avenue would include two existing city lots plus a private facility. A two-level deck is recommended by 1980 to provide parking for both



long-time and short-time parking.

- (12) The site is located at the intersection of Ottawa Street and Grand Avenue. It was recently purchased by the city. Initially, a surface facility with a capacity of about 70 spaces is recommended. A 300-space garage is proposed when future demands warrant.
- (13) This site would involve the development of the half block on the side of Grand Avenue between Washtenaw and Kalamazoo Streets. It would include two existing lots. A two-level facility would provide approximately 350 spaces.
- (14) The one-half block fronting on Grand Avenue between Kalamazoo and Lenawee Streets, is recommended for a two-level facility which would provide approximately 350 spaces. It was assumed that a portion of the frontage along Washington Street presently used as parking area, would be developed for retail or commercial use.
- (15) This facility, located on the east side of Grand Avenue north of Michigan Avenue, should be expanded to provide 150 spaces.
- (16) The city has recently purchased additional property to expand the previously developed surface lots on the east side of Grand Avenue between Michigan Avenue and Washtenaw Street. Also, the city has a 78-space lot at River and Kalamazoo Streets. It is recommended that the entire area between Michigan Avenue and Kalamazoo Street on the east side of Grand Avenue and River Street, be developed for off-street



parking. At least 600 spaces should be provided in this area.

- (17) This site would involve the development of the entire block bounded by Kalamazoo, Cherry, Lenawee Streets and Grand Avenue as a 350-space surface lot. This facility would provide for overflow parking of the short-time facilities located on the west side of Grand Avenue and for all-day parking for the core area.

The development or expansion of the sites should be geared to the over-all plan and the availability of funds. Private enterprise should be encouraged to construct parking as a part of new business establishments. Of course, additional or alternate sites could be developed in lieu of the proposed areas.

Based on the present needs in the CBD, the development of a 350-space garage on the east side of Capitol Avenue between Kalamazoo and Washtenaw Streets, should be constructed during the first phase. Also, a surface lot should be developed on Capitol Avenue between Kalamazoo and Lenawee Streets. Finally, the entire block bounded by Shiawassee Street, Capitol Avenue, Ionia Street, and Seymour Street should be acquired for surface lot development.

During the second stage, consolidation and expansion of facilities along the west side of Grand Avenue should be emphasized to provide more short-time capacity. Also, expansion of the sites along the Grand River should be accomplished.



The final stages will consist primarily of deck or garage construction. Individual site development will be dependent on usage, revenues and land use in the primary influence area.

Methods of Development - Most of the off-street facilities have been developed by private enterprise. However, the city has developed several surface lots to serve both short-time and all-day parking. The city has financed them on a pay-as-you-go or deferred payment basis, whereas all the revenues received from the off-street facilities and the curb meters are combined and utilized to acquire additional properties for expansion of the parking system. In some instances, the payments have been spread over a period of several years. It is estimated by the city that with the recent acquisitions, additional sites cannot be purchased for the next five years. During 1959, the total income of the parking system was about \$275,000. Expenses are about \$90,000 a year, therefore, the net income of the system from operations was approximately \$185,000. A substantial part of the net revenues were utilized for payments of land acquired for recent extensions to the system.

The city could continue with the present method and gradually provide other additional parking spaces; however, a substantial increase could be provided by the issuance of revenue bonds financed over a 30 or 40-year period. The present net revenues and the revenues of the new facilities could be combined to provide the debt service payment and the necessary coverage required in revenue bond financing. Based on a 40-year debt period, and an interest rate of four and one-half per cent, the current net revenues would service including principal, and interest bond issue



of about \$2,300,000. Revenues that would be derived from new facilities have not been included in this estimate.

It is apparent that an expanded municipal program could be initiated. However, it is emphasized that private enterprise should be given the opportunity to continue the development of off-street parking. In many instances, the parking facility could be an integral part of the development of an office building or retail establishment. In this way, the land would serve a dual purpose --- parking and the commercial development.



## VII - WASHINGTON AVENUE MODIFIED MALL

Washington Avenue is in a sense the backbone of Lansing's CBD because on both sides of it are the retail stores, offices, parking and side streets that make up the CBD. This study has started with the overall picture and worked into the detail of the CBD. Washington Avenue represents the last but most dramatic of the various elements that make a strong CBD.

The major problem on Washington Avenue is that of the pedestrian - vehicle conflict. Only when a traveler becomes a pedestrian can he or she be of value to the CBD, because then the shopper, visitor or worker can carry on business. The objective now is to make the visitor's walk as short and as pleasant as possible. To this end we want to create an environment that has a minimum of conflict between the pedestrian and the moving vehicle. At the same time we want to make an atmosphere which creates a relaxed and gay mood so that people enjoy visiting the CBD.

At the traffic study showed in 1957 forty per cent of all vehicles entering the CBD had destinations elsewhere. In addition to this forty per cent are the numerous cars cruising on Washington Avenue looking for a parking space. Washington Avenue is wide, averaging 77 feet from curb to curb. The safety requirement, which prohibits jaywalking and forces pedestrians to cross the streets at the corner only with the signals, creates an unpleasant, unsatisfactory, and by today's standards, an obsolete shopping center.



A mall, an important ingredient in the advanced modern shopping center, is basically a device to separate pedestrians from moving vehicles, which permits convenient pedestrian access to all stores and offices on the more convenient two-sided street. We have therefore converted Washington Avenue into a mall but not completely. Private automobile traffic is prohibited the length of Washington Avenue from Lenawee to Ottawa but busses are permitted. The bus lanes may be used by emergency vehicles, street cleaning equipment, and even during the early morning hours by delivery trucks.

Since downtown cannot provide sufficient parking spaces or highway capacity to handle the cars, a healthy mass transit system is a major asset to the CBD. By having bus lanes in the heart of the CBD, all bus routes could loop on Washington during the time the stores are open. During the times of day when office workers are arriving or leaving, the busses could eliminate the retail area and concentrate on the office building core. The bus traffic on Washington Avenue would constitute only 2% of the vehicle traffic as at present peak hours.

If the mass transit system does not take advantage of the lanes created on the modified mall, we suggest that one or two trackless trains be purchased by the merchants and other downtown interests. These trackless trains would be similar to the ones now in use at the Oldsmobile plant except that a roof, side windows and decorations would be added. These trackless trains are run by electricity and by arrangement with the local power company could easily have their batteries recharged each night at the nearby power plant.



The trackless train has been a novelty over the years since they were first introduced at the New York Worlds Fair in 1939. *Carrying passengers only*

In the CBD the trains could transport shoppers from the office core to the retail core and back.

A general plan has been suggested which would reduce the curb to curb dimensions from the present 77 feet to as little as 27 feet at some corners, with a maximum of 45 feet in the center of the block. Also suggested in each of the blocks are the planting of trees, shrubbery, the placing of benches, sculpture, covered bus shelters with comfortable benches and covered canopies extending the length of the sidewalks. We have also planned near certain corners, all glass buildings 20 feet by 54 feet that can be used for exhibitions or even leased to promote Lansing's products.

At certain intersections in the future cross traffic, east and west, can be eliminated. It is not included in the present plans but it would be practical. By eliminating the cross traffic a plaza would be formed. Attractive plantings, benches and fountains could be located therein. The plazas can be used for seasonal ceremonies such as Christmas, Easter, Holloween, etc.

One of these plazas would be located at the intersection of Michigan and Washington. This plaza would highlight the office core area and could be used to accentuate the view of the State Capitol building from Michigan.

The second plaza could be located at the intersection of Washington and Washtenaw. This plaza would be in the center of the retail core and could be used to highlight retail activities. The parking garage under construction at Washtenaw and Capital would not be affected by a plaza at this location if the



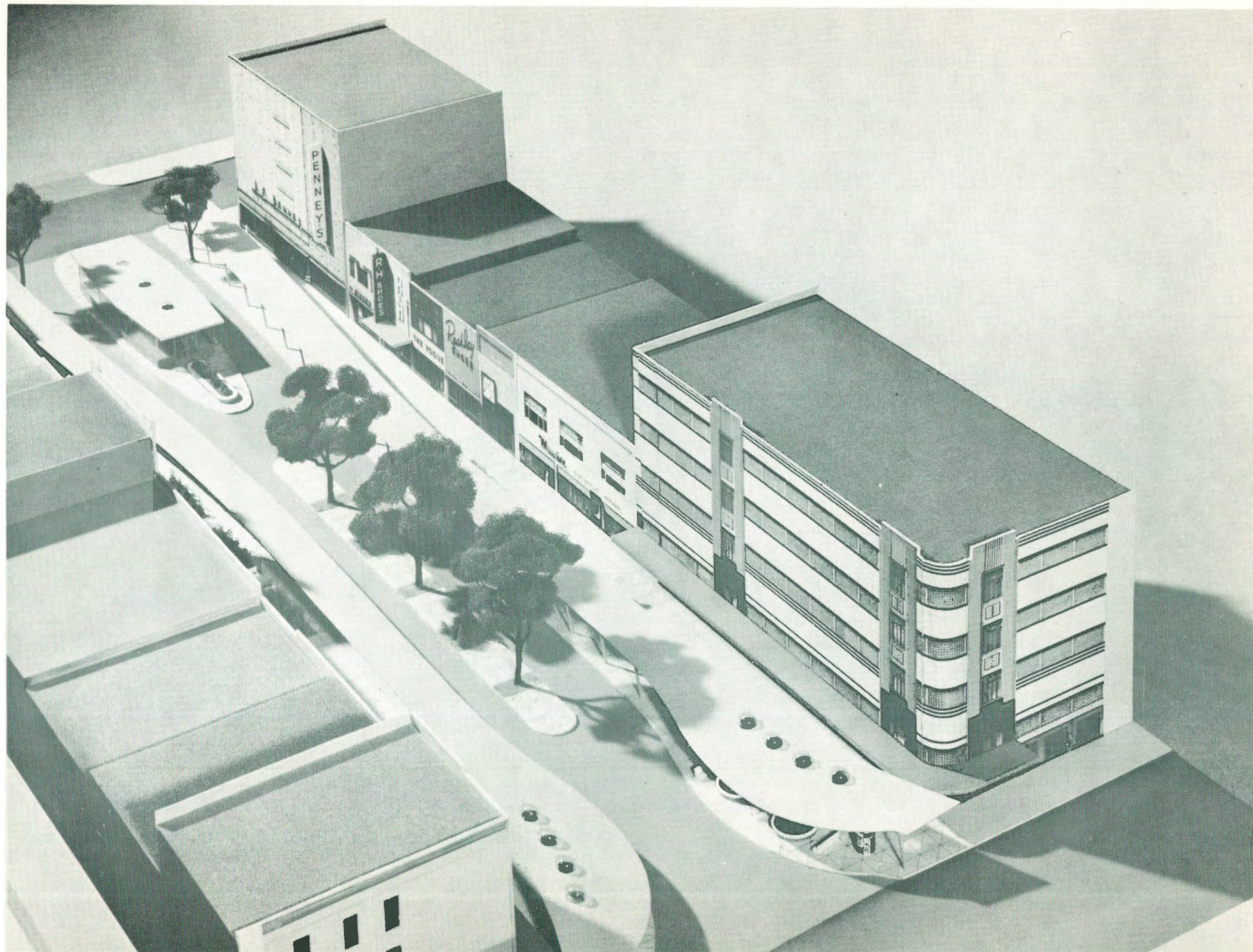
preliminary floor plan is followed which makes all entrances on Capitol and only exit on Washtenaw.

The retail plaza could also be located at Kalamazoo and Washington but by locating it at Washtenaw it would stabilize the retail district and prevent further shifting of stores south except for expansion of the retail core with new stores. In addition a prime east-west street would be left open for traffic, namely Kalamazoo.

As Washington Avenue is a very wide street it would not be practical to enclose it and create an all weather street as many suburban shopping centers are doing today. We can however try to protect the pedestrian from sun, rain and snow by means of a canopy over the widened sidewalk area. This canopy would be built on both sides of the street so that all the buildings would benefit. There would be only shady sidewalks so necessary to retailing. The canopy is planned to be 12 feet wide and approximately 9 feet 6 inches high. It would be sloped so that it would be aligned with the sight line from one side of the street to the other, so that there is a minimum of interference with visibility to the signs and storefronts. In addition the canopy would be curved so that it would be close to the buildings at the corners and further away from the buildings at the center of the block. These sweeping curves are a pleasant relief from the straight rigid lines of the present street and building pattern.

On the following pages we show several views of what the modified mall would look like. A model has been made of the Washington block from Kalamazoo to Washtenaw and the following pictures from various angles were taken.





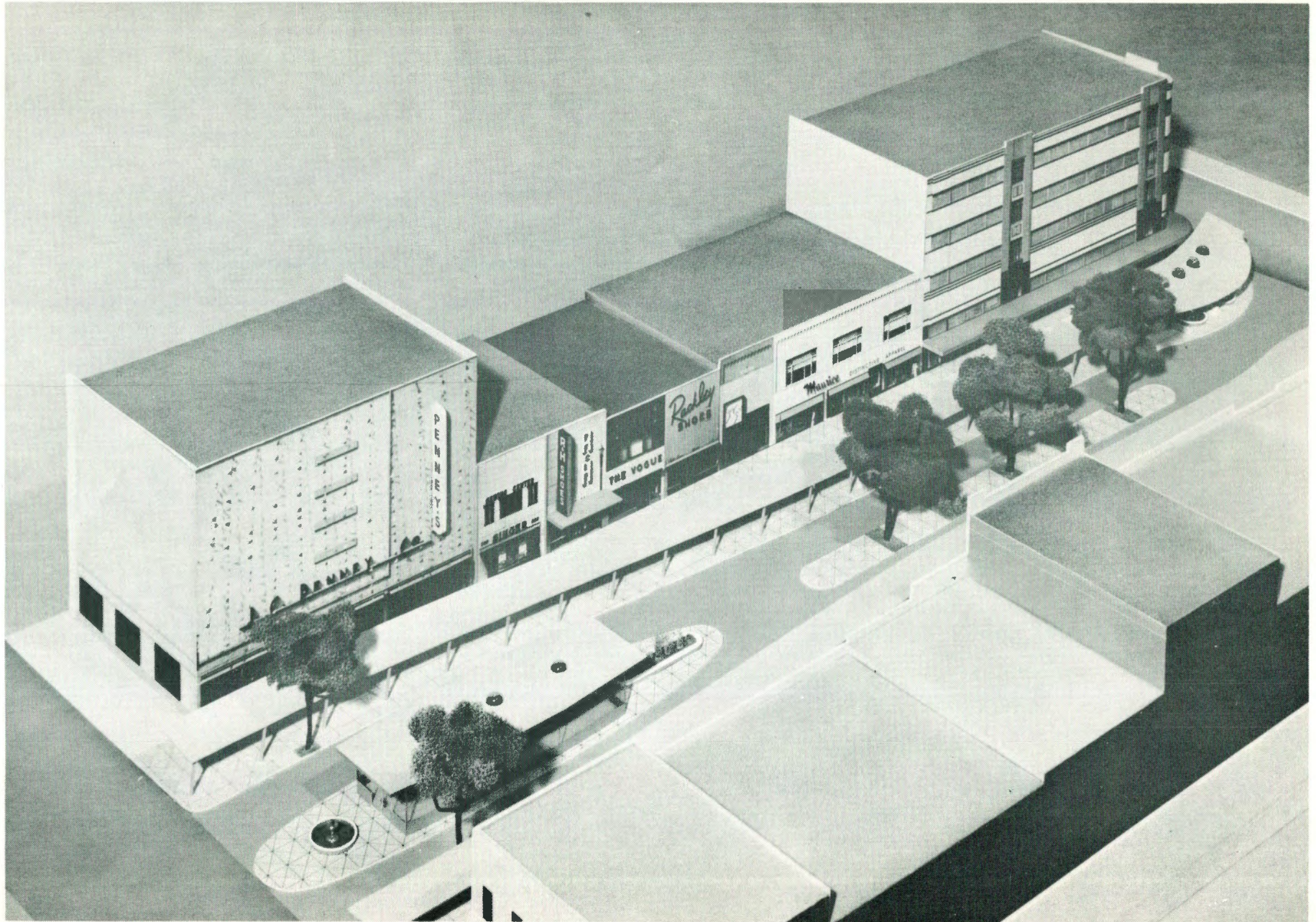
Washington Avenue Mail — Kalamazoo Street to Washendow Street — Lansing, Michigan.





**Washington Avenue Mall — Kalamazoo Street to Washtenaw Street — Lansing, Michigan.**





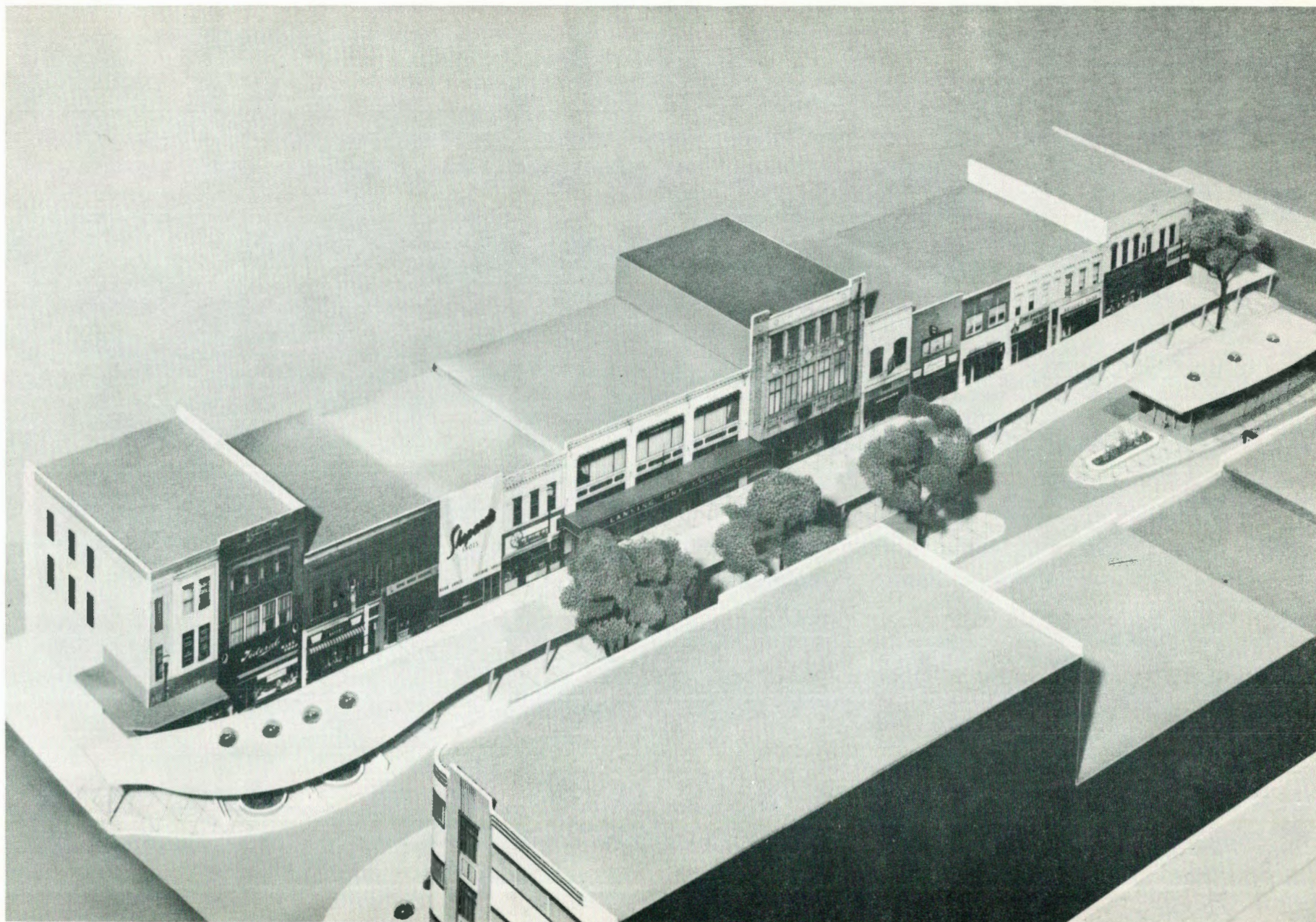
Washington Avenue Mall — Kalamazoo Street to Washtenaw Street — Lansing, Michigan.  
Forest Parke Library and Archives - Capital Area District Libraries





Washington Avenue Mall — Kalamazoo Street to Washtenaw Street — Lansing, Michigan.





Washington Avenue Mall — Kalamazoo Street to Washtenaw Street — Lansing, Michigan.  
Forest Parke Library and Archives - Capital Area District Libraries



Note how the street has been narrowed and the curves of the new sidewalk and canopy create an interesting design. The sidewalk on each block of the modified mall would have a different colored cement in order to add to the atmosphere.

A new street lighting system is necessary to add to the night time appearance of the CBD. It is suggested that lights be attached to the buildings that would shine out on the modified mall. These lights would be at an intensity which would light the mall adequately but not be in competition with the store windows. The canopy lighting would also be non-competitive lighting with the store windows.

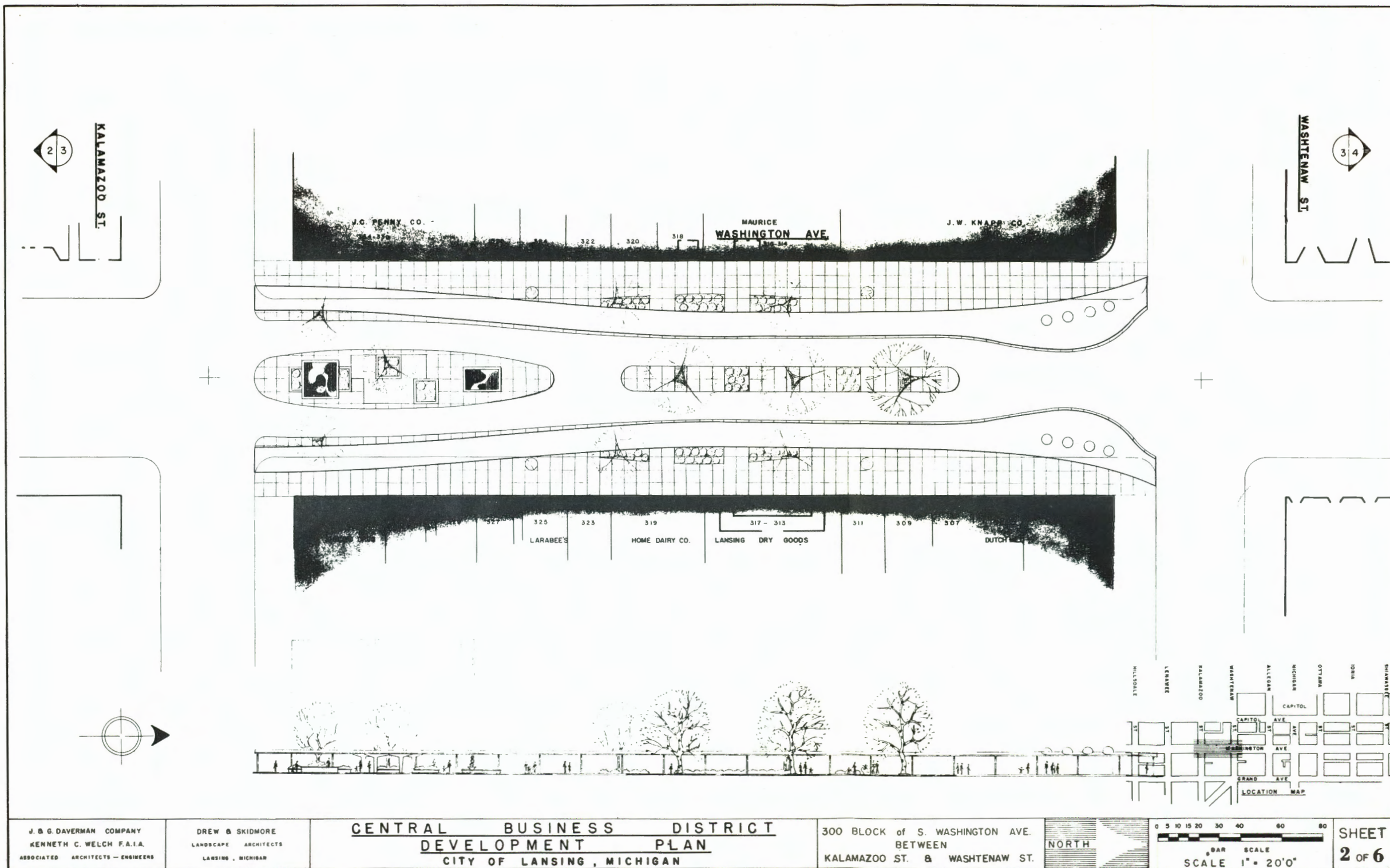
In detailing the modified mall for Washington Avenue we have had to take into account numerous underground and above ground utilities. Some of these utilities are water lines, man holes, steam lines and vaults, electrical lines and vaults, telephone lines, gas lines, fire and police alarm lines, sewer lines, catch basins and fire hydrants. Also taken into consideration is the old trolley line bed which lies in the center of Washington Avenue covered with paving.

In the following pages we show a detail plan of each block of Washington Avenue as a modified mall. We have taken into account all of the above utilities as well as basements which project under the sidewalk in locating the various improvements. On the Kalamazoo-Washtenaw block we have superimposed the various utilities that had to be accounted for.

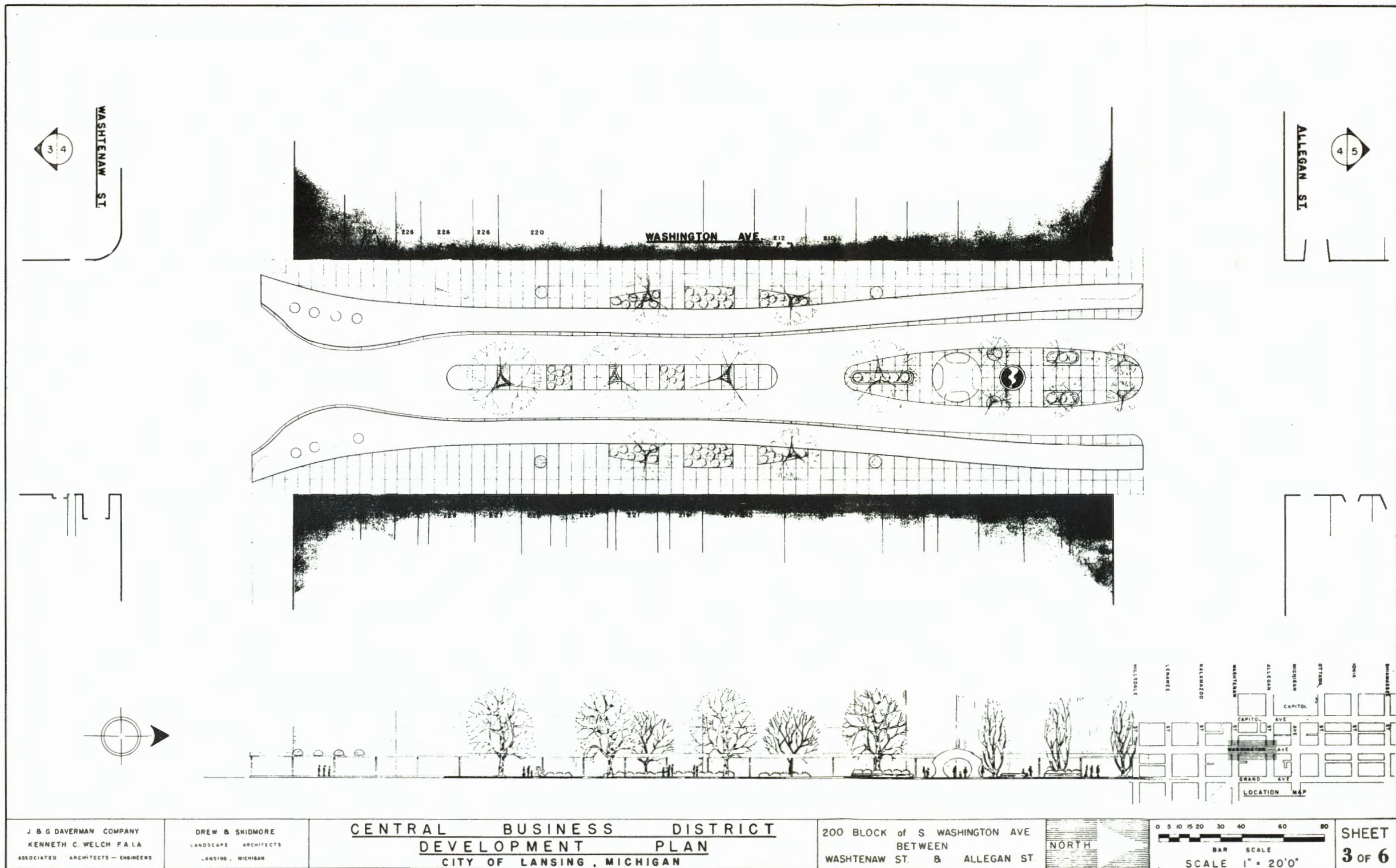




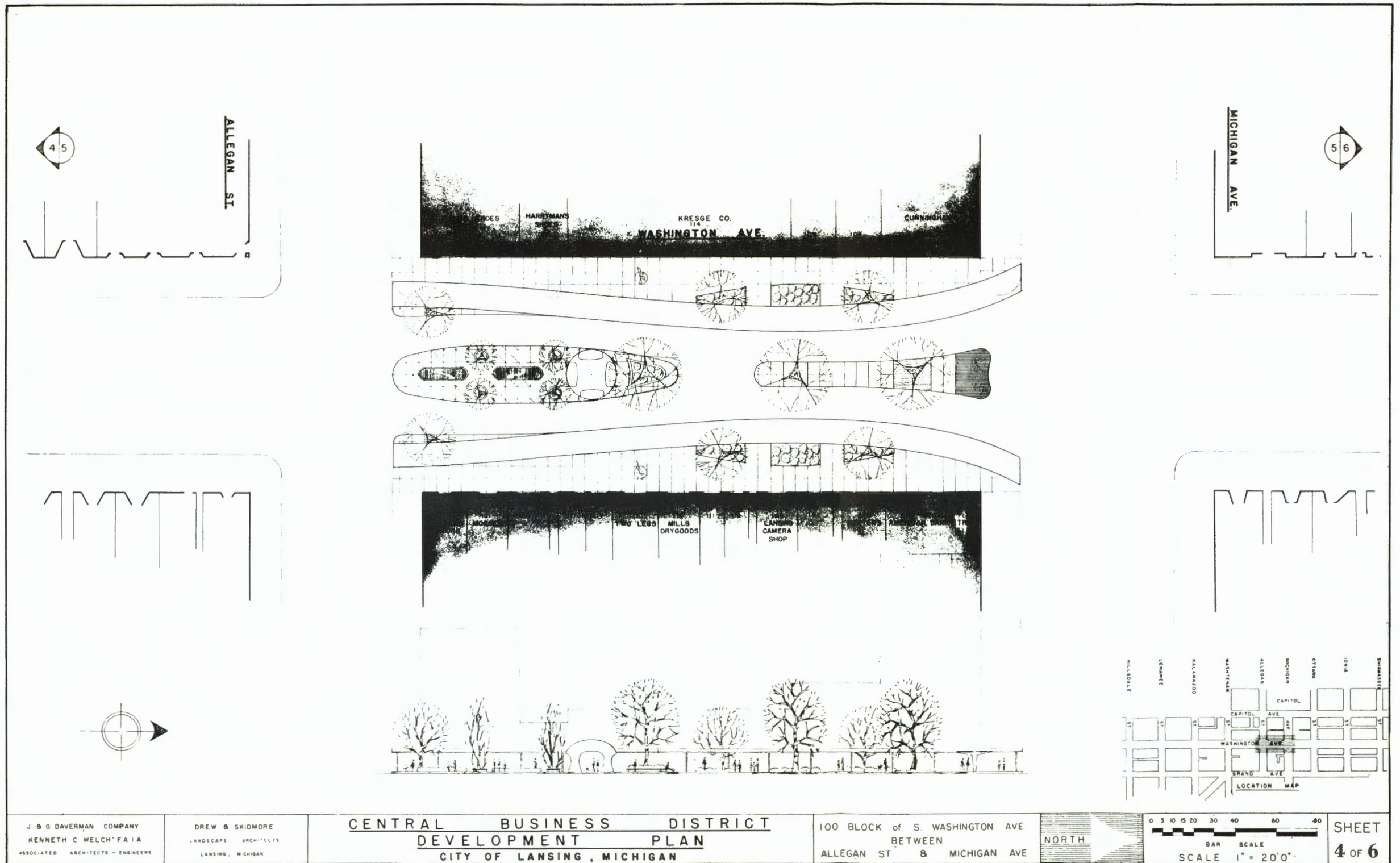




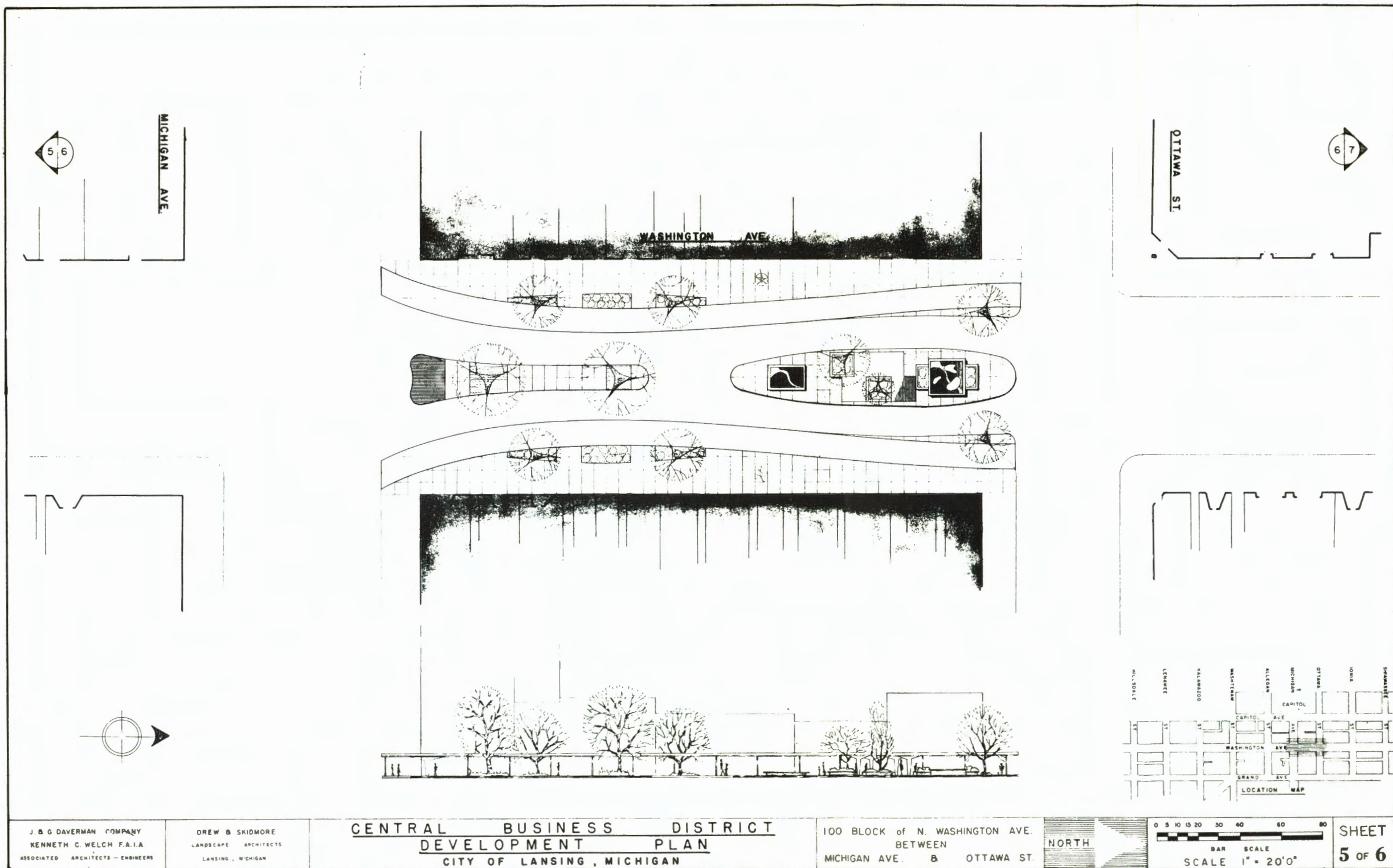




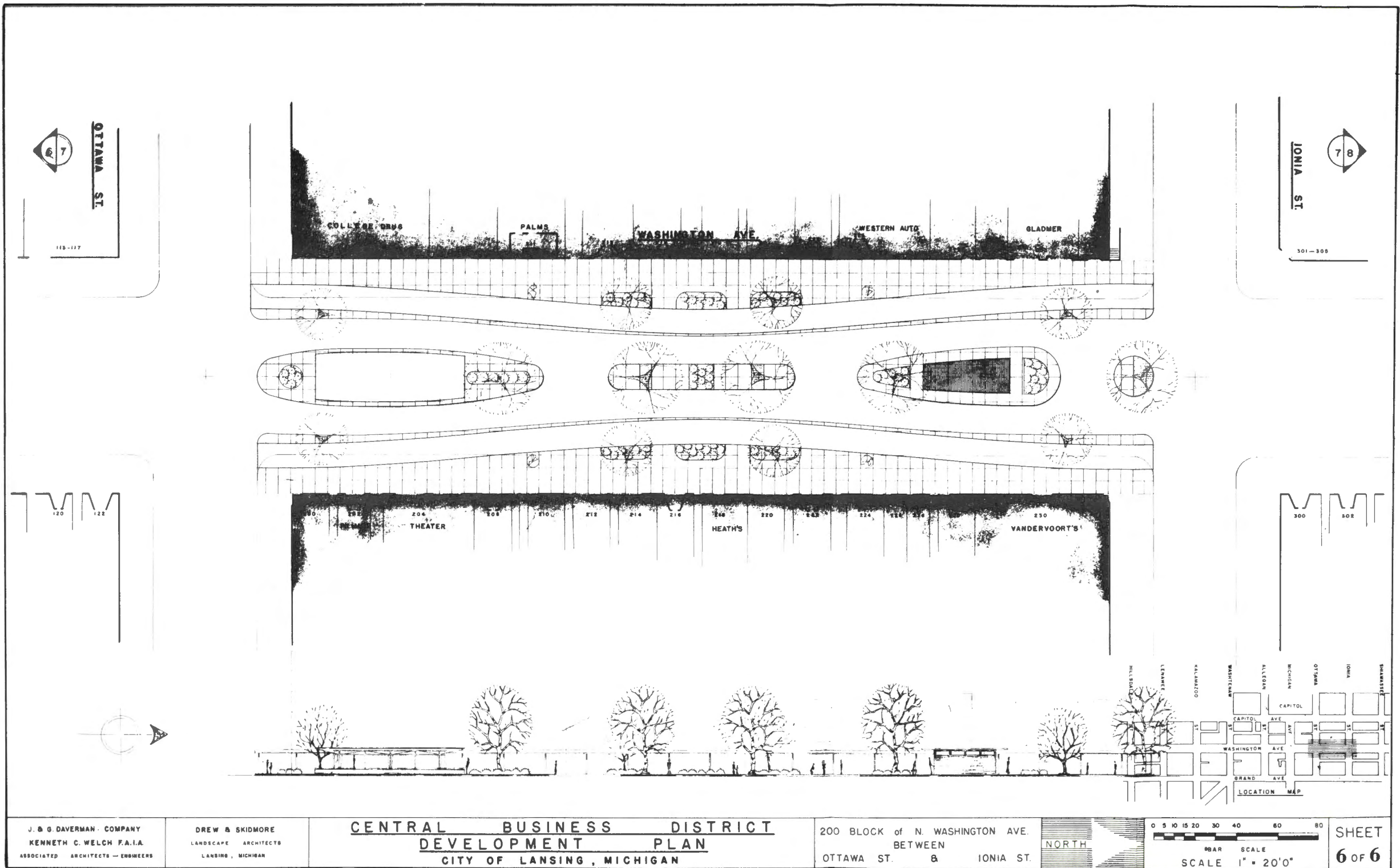




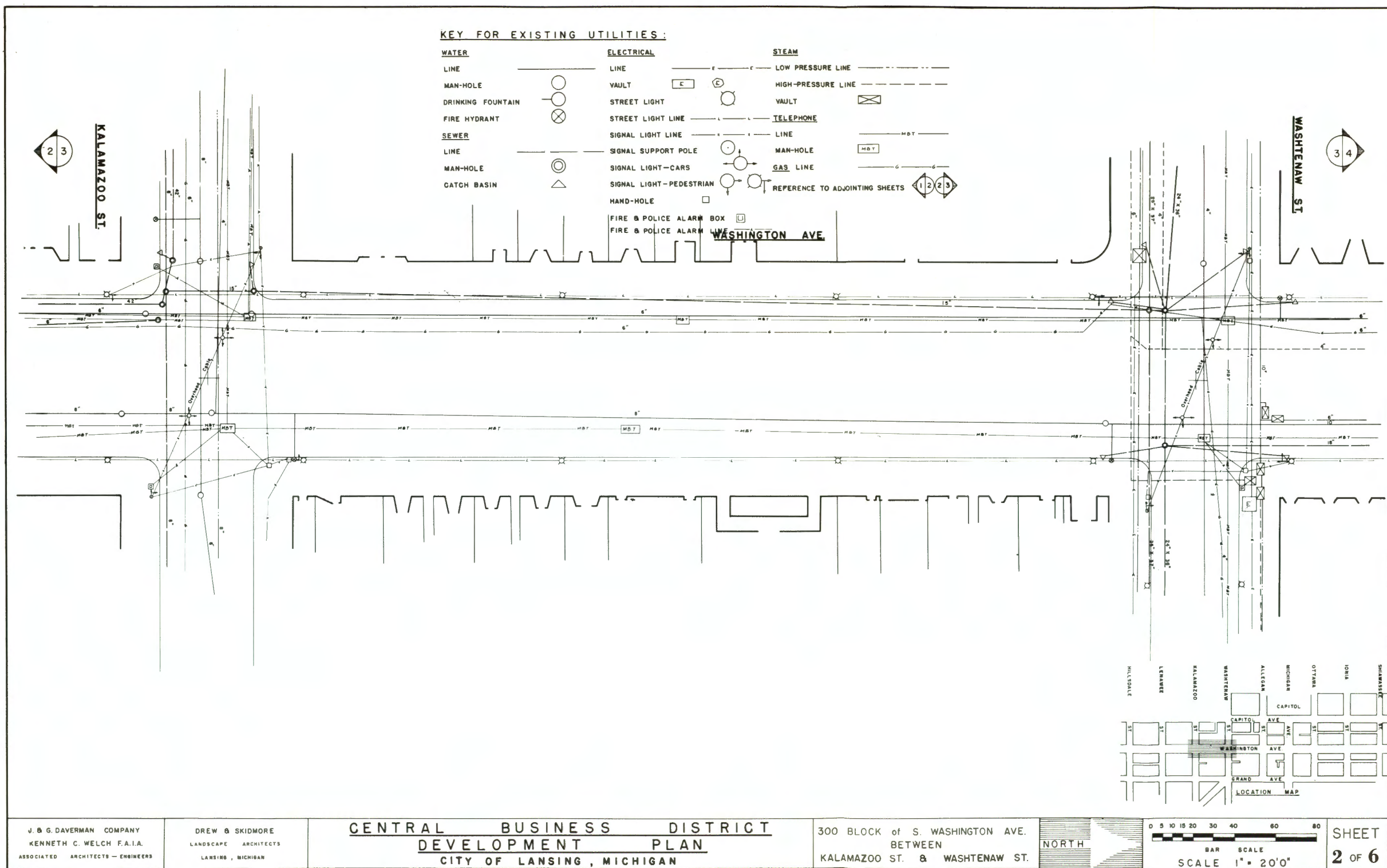














## COST OF THE MALL

From the detail plans preliminary estimates have been made as to the possible cost of such a modified mall. It must be emphasized that these are preliminary figures as a great deal of variation can occur in them due to what the City of Lansing is willing to provide in the way of labor, equipment and materials. Also how much the public utility companies would be willing to bear. Cost estimates of one block from Kalamazoo to Washtenaw of the Washington Avenue modified mall are as follows:

Concrete Sidewalks - remove & replace	\$30,900
Curb	3,060
Drainage	3,800
Sculptures	2,400
Plantings - 4 shade trees 6 ornamental trees, 97 evergreens, grass	2,600
Canopy	42,240
Contingencies	<u>10,000</u>
Total	\$95,000

This cost would represent about \$120 per front foot per side.

## FUNDS FOR IMPROVEMENT

The source of funds for this improvement must be determined locally. Several different methods are possible. The benefiting property owners could bear the entire cost on a special assessment district to be paid off with interest over a period of years. Benefiting merchants could make contributions.



The City of Lansing could contribute money as well as the facilities of the City's departments. A combination of these various methods will probably be the solution.

The costs of such an improvement should be more than offset by the benefits accruing to the downtown merchants and property owners and to the City of Lansing as a whole. Merchants will find increased sales. Property owners will have increased rent but it will be because of increased business activity on the part of the tenants which can afford to pay the increase. The City of Lansing will find as other cities have found that with the street improvement property owners will begin improving their properties. New buildings will be built. All this will result in increased assessed valuations giving increased tax revenue to the City Treasury. Where cities contributed money towards improvements of this type or parking facilities they have found that the return has been \$2 to \$3 for every \$1 spent by the City.

#### RESULTS OF MODIFIED MALL

The modified mall will create a very pleasing atmosphere. People will be able to stroll leisurely from one store to another without the conflict of automobiles. Window shopping will be a pleasure. Merchants will notice an increase in their impulse sales. Over a period of time the so called "wrong side" of the street will find that pedestrian traffic will be equally divided and sales on both sides of the street will be good. This is because shoppers will be able to cross from one side of the street to the other with ease and almost at any point in the block.



In the first stages the mall will probably be two blocks long in the retail area. As the novelty of it wears off and people begin to live with the relaxed atmosphere, the store merchants fronting on the mall will see that their sales are constantly at a higher level than before the inception of the mall.

As the mall expands on Washington Avenue covering the downtown area, retail sales will grow. The mall may get more credit and attention than it warrents because it is the most beautiful and the most obvious of the major improvements needed in the downtown. The mall alone is not sufficient to solve downtown's problems. It is the last improvement of several.



## VIII - CONCLUSION

As stated in the introduction downtown Lansing cannot be torn down and rebuilt nor can it be left by the wayside to decay. This study has tried to show where downtown Lansing is today - its strength, its weaknesses. The study has also shown what should be done to emphasize its strength and correct its weakness for the present as well as the future.

A project of this size cannot be done all at one time; it must be done in steps. We suggest that the first areas to be worked on are traffic and parking.

The steps that should be taken under traffic are as follows:

1. Pushing the completion of the Interstate 96 urban connector that will follow St. Joseph and Main on the southern end of the CBD.
2. Reversing the traffic flow on Capitol and Grand.
3. A new south Capitol Avenue bridge to carry one way traffic south from the CBD and the urban connector.
4. With the advent of the Washington Avenue modified mall the elimination of automobile traffic on Washington Avenue.

For parking steps which may be taken simultaneously with the new traffic changes and the modified mall we suggest the following:

1. The issuance of revenue bonds for the purchase of additional parking sites as well as parking ramp construction.
2. The purchase of parking sites and the building of a parking ramp near the retail core on Capitol.
3. Additional purchases of parking spaces for office demand.



Once the parking program has met the present needs then the modified mall on Washington Avenue can be instituted. Concurrent with this would be the reversal of traffic in the CBD area and the elimination of automobile traffic on Washington.

All of the modified mall will not be built at once. The city will likely want to do at first two or three blocks. We strongly recommend that the mall be put not on a temporary basis but a permanent one. The mall will draw the attention of the public and will receive the most publicity but its success is dependent upon adequate parking and proper traffic flow.

At the time that the above actions are taking place the City of Lansing and the downtown interests should encourage the use of the mass transit system. The State of Michigan can help by charging its employees a parking fee. Not only will this charge create bus riders but the funds raised can be used to purchase land in the Capitol development area.

New office buildings should be built north of Michigan where there is need of modernization and where there is sufficient all day parking. Retailing should be encouraged to locate south of Michigan. Needless to say the modified mall will attract stores if the mall is begun in the retail core area first.

A publicity program emphasizing the CBD's strength in fashion shopping goods over any suburban shopping center will pull people. With the new parking areas adjacent to stores and the improved accessibility to the CBD this publicity program can pay big dividends.



The program suggested above cannot be done over night nor can it be done alone. Team action is required by all interested parties - business, political, labor, civic and educational groups. All have a financial stake in maintaining the CBD.

The result of this over all program will be that the CBD will remain the hub of metropolitan Lansing and that focal point will be strong and dynamic, carrying its full share of what makes Lansing a modern, progressive city.



